



Natural Resources Conservation Service In cooperation with the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin

Soil Survey of Washburn County, Wisconsin

Subset of Major Land Resource Areas 90 and 91



NRCS Accessibility Statement

The Natural Resources Conservation Service (NRCS) is committed to making its information accessible to all of its customers and employees. If you are experiencing accessibility issues and need assistance, please contact our Helpdesk by phone at 1-800-457-3642 or by e-mail at ServiceDesk-FTC@ftc.usda.gov. For assistance with publications that include maps, graphs, or similar forms of information, you may also wish to contact our State or local office. You can locate the correct office and phone number at http://offices.sc.egov.usda.gov/locator/app.

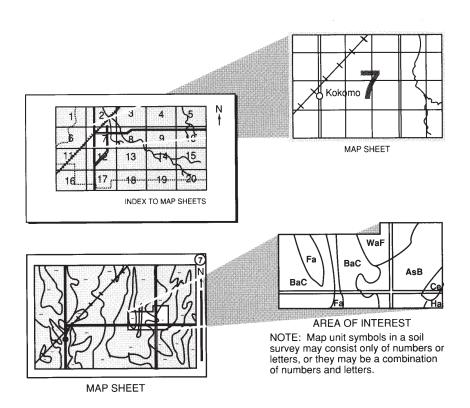
How To Use This Soil Survey

This publication consists of a manuscript and a set of soil maps. The information provided can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**. Note the number of the map sheet and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Contents**, which lists the map units by symbol and name and shows the page where each map unit is described. The map symbols and names also appear as bookmarks, which link directly to the appropriate page in the publication.

The **Contents** shows which table has data on a specific land use for each detailed soil map unit. Also see the **Contents** for sections of this publication that may address your specific needs.



National Cooperative Soil Survey

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey. This survey was made cooperatively by the Natural Resources Conservation Service and the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin. The survey is part of the technical assistance furnished to the Washburn County Land and Water Conservation District. The State of Wisconsin provided financial assistance, and the Wisconsin Department of Natural Resources provided technical assistance.

Major fieldwork for this soil survey was completed in 2001. Soil names and descriptions were approved in 2002. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2002. Digitizing of this soil survey was completed under the direction of the Madison, Wisconsin, digitizing unit in 2002. The most current official data are available on the Internet.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

Nondiscrimination Statement

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410, or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Caption for Cover Photo

The Spooner Hills (background) represent a common landform in central Washburn County. The surrounding valley floors are flat, sandy remnants of Glacial Lake Grantsburg or outwash plains.

Additional information about the Nation's natural resources is available online from the Natural Resources Conservation Service at http://www.nrcs.usda.gov.

Contents

How To Use This Soil Survey	i
Foreword	
How This Survey Was Made	1
Formation and Classification of the Soils	5
Table 1.—Classification of the Soils	9
Soil Map Unit Descriptions	11
3A—Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes, frequently	
flooded	
22A—Comstock silt loam, 0 to 3 percent slopes	14
24A—Poskin silt loam, 0 to 3 percent slopes	
27A—Scott Lake sandy loam, 0 to 3 percent slopes	
28B—Haugen-Rosholt complex, 2 to 6 percent slopes, very stony	
28C—Haugen-Rosholt complex, 6 to 12 percent slopes, very stony	
33B—Chetek sandy loam, 1 to 6 percent slopes	
33C—Chetek sandy loam, 6 to 12 percent slopes	
38A—Rosholt sandy loam, 0 to 2 percent slopes	
38B—Rosholt sandy loam, 2 to 6 percent slopes	
38C—Rosholt sandy loam, 6 to 12 percent slopes	
38D—Rosholt sandy loam, 12 to 20 percent slopes	
42D—Amery sandy loam, 12 to 25 percent slopes, very stony	
43B—Antigo silt loam, 1 to 6 percent slopes	
43C—Antigo silt loam, 6 to 15 percent slopes	
43D—Antigo silt loam, 15 to 30 percent slopes	
48A—Brill silt loam, 0 to 3 percent slopes	
63A—Crystal Lake silt loam, 0 to 2 percent slopes	
63B—Crystal Lake silt loam, 2 to 6 percent slopes	
63C—Crystal Lake silt loam, 6 to 12 percent slopes	
63E—Crystal Lake silt loam, 20 to 35 percent slopes	
64A—Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded 69B—Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	
69C—Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	
69E—Keweenaw-Sayner-Vilas complex, 6 to 45 percent slopes, stony	
74B—Vilas loamy sand, 0 to 6 percent slopes	
74C—Vilas loamy sand, 6 to 15 percent slopes	
74D—Vilas loamy sand, 15 to 30 percent slopes	
100B—Menahga sand, 0 to 6 percent slopes	
100C—Menahga sand, 6 to 12 percent slopes	
100D—Menahga sand, 12 to 30 percent slopes	
127D—Amery-Rosholt complex, 12 to 20 percent slopes, very stony	
127E—Amery-Rosholt complex, 20 to 45 percent slopes, very stony	
156B—Magnor, very stony-Magnor complex, 0 to 4 percent slopes	
157B—Freeon, very stony-Freeon complex, 2 to 6 percent slopes	
157C—Freeon, very stony-Freeon complex, 6 to 12 percent slopes	
160A—Oesterle sandy loam, 0 to 2 percent slopes	
182B—Padus sandy loam, 0 to 6 percent slopes	

182C—Padus sandy loam, 6 to 15 percent slopes	44
192A—Worcester sandy loam, 0 to 3 percent slopes	45
193A—Minocqua muck, 0 to 2 percent slopes	46
215B—Pence sandy loam, 0 to 6 percent slopes	
215C—Pence sandy loam, 6 to 15 percent slopes	
215D—Pence sandy loam, 15 to 30 percent slopes	48
315A—Rib silt loam, 0 to 2 percent slopes	
337A—Plover fine sandy loam, 0 to 3 percent slopes	
368B—Mahtomedi-Cress complex, 2 to 6 percent slopes	
368C—Mahtomedi-Cress complex, 6 to 12 percent slopes	
368D—Mahtomedi-Cress complex, 12 to 25 percent slopes	
371A—Croswell loamy sand, 0 to 3 percent slopes	
380B—Cress-Rosholt complex, 2 to 6 percent slopes	
380C—Cress-Rosholt complex, 6 to 12 percent slopes	
380D—Cress-Rosholt complex, 12 to 25 percent slopes	
383B—Mahtomedi loamy sand, 0 to 6 percent slopes	
383C—Mahtomedi loamy sand, 6 to 12 percent slopes	
383D—Mahtomedi loamy sand, 12 to 30 percent slopes	
396B—Friendship-Wurtsmith-Grayling complex, 0 to 6 percent slopes	
397A—Perchlake loamy fine sand, 0 to 2 percent slopes	
399B—Grayling sand, 0 to 6 percent slopes	
399C—Grayling sand, 6 to 12 percent slopes	
399D—Grayling sand, 12 to 30 percent slopes	
405A—Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	
406A—Loxley mucky peat, 0 to 1 percent slopes	
407A—Seelyeville and Markey soils, 0 to 1 percent slopes	
410A—Seelyeville and Cathro soils, 0 to 1 percent slopes	
412A—Rifle and Tacoosh soils, 0 to 1 percent slopes	
415A—Greenwood mucky peat, 0 to 1 percent slopes	
439B—Graycalm-Menahga complex, 0 to 6 percent slopes	
439C—Graycalm-Menahga complex, 6 to 12 percent slopes	
439D—Graycalm-Menahga complex, 12 to 30 percent slopes	
441C—Freeon, very stony-Cathro complex, 0 to 15 percent slopes	
442C—Haugen, very stony-Greenwood complex, 0 to 15 percent slopes	
443D—Amery, very stony-Greenwood complex, 0 to 35 percent slopes	
461A—Bowstring muck, 0 to 1 percent slopes, frequently flooded	
484A—Greenwood and Beseman soils, 0 to 1 percent slopes	
495B—Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes	
495C—Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes	
495D—Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes	
497A—Meenon loamy sand, 0 to 3 percent slopes	
515A—Manitowish sandy loam, 0 to 3 percent slopes	
521A—Dody muck, 0 to 2 percent slopes	80
524E—Rock outcrop-Frogcreek-Metonga complex, 2 to 45 percent slopes,	
very stony	
542B—Haugen, very stony-Haugen complex, 2 to 6 percent slopes	
542C—Haugen, very stony-Haugen complex, 6 to 12 percent slopes	
543B—Anigon silt loam, 2 to 6 percent slopes	
543C2—Anigon silt loam, 6 to 12 percent slopes, eroded	
544F—Menahga and Mahtomedi soils, 30 to 45 percent slopes	
555A—Fordum silt loam, 0 to 2 percent slopes, frequently flooded	
574B—Sayner loamy sand, 0 to 6 percent slopes	
574C—Sayner loamy sand, 6 to 15 percent slopes	
574E—Sayner loamy sand, 15 to 45 percent slopes	89

579B—Parkfalls sandy loam, 0 to 4 percent slopes, very stony	90
600A—Haplosaprists and Psammaquents, 0 to 2 percent slopes	90
615B—Cress sandy loam, 0 to 6 percent slopes	
615C—Cress sandy loam, 6 to 12 percent slopes	
615D—Cress sandy loam, 12 to 30 percent slopes	
623A—Capitola muck, 0 to 2 percent slopes, very stony	
624A—Ossmer silt loam, 0 to 3 percent slopes	
632A—Aftad fine sandy loam, 0 to 2 percent slopes	
632B—Aftad fine sandy loam, 2 to 6 percent slopes	
632C—Aftad fine sandy loam, 6 to 12 percent slopes	
633F—Pence and Padus soils, 30 to 45 percent slopes	
648B—Sconsin silt loam, 1 to 6 percent slopes	
670C—Keweenaw-Pence complex, 6 to 15 percent slopes, stony	
670E—Keweenaw-Pence complex, 15 to 45 percent slopes, stony	
671B—Spoonerhill, stony-Spoonerhill complex, 2 to 6 percent slopes	
680B—Stanberry-Pence complex, 2 to 6 percent slopes, stony	
683A—Tipler sandy loam, 0 to 3 percent slopes	
	103
706A—Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded	100
724A—Rib-Rock outcrop complex, 0 to 2 percent slopes	
726B—Sissabagama loamy sand, 0 to 6 percent slopes	
733A—Wozny muck, 0 to 2 percent slopes, very stony	
771A—Lenroot loamy sand, 0 to 3 percent slopes	
827A—Scoba sandy loam, 0 to 3 percent slopes	107
853C—Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very	
stony	
856B—Stinnett silt loam, 0 to 4 percent slopes, very stony	
857B—Frogcreek silt loam, 2 to 6 percent slopes, very stony	
857C—Frogcreek silt loam, 6 to 15 percent slopes, very stony	111
873B—Stanberry sandy loam, 1 to 6 percent slopes, very stony	
873C—Stanberry sandy loam, 6 to 15 percent slopes, very stony	112
873D—Stanberry sandy loam, 15 to 30 percent slopes, very stony	113
905A—Cublake loamy sand, 0 to 3 percent slopes	114
926A—Flink loamy sand, 0 to 3 percent slopes	115
943D—Stanberry, very stony-Greenwood complex, 0 to 35 percent slopes	115
948A—Billyboy silt loam, 0 to 3 percent slopes	
970C—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent	
slopes	117
970E—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 45 percent	
slopes	119
1070C—Fremstadt, stony-Cress complex, 6 to 15 percent slopes	
1070D—Fremstadt, stony-Cress complex, 15 to 30 percent slopes	
1080B—Spoonerhill-Spoonerhill, stony-Cress complex, 1 to 6 percent	
slopes	122
1653C—Stanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very	122
stony	12/
2015—Pits	
2050—Landfill	
· · · · · · · · · · · · · · · · · · ·	
3125A—Meehan loamy sand, 0 to 2 percent slopes	
3126A—Wurtsmith loamy sand, 0 to 3 percent slopes	
3276A—Au Gres loamy sand, 0 to 3 percent slopes	12/
3312B—Glendenning, very stony-Glendenning complex, 0 to 4 percent	400
slopes	128

3336A—Fenander fine sandy loam, 0 to 2 percent slopes	. 129
3403A—Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes	. 130
3424C—Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very	
stony, rocky	
3446A—Newson muck, 0 to 2 percent slopes	. 133
3448B—Grettum loamy sand, 0 to 6 percent slopes	. 134
3448C—Grettum loamy sand, 6 to 12 percent slopes	
3516A—Slimlake sandy loam, 0 to 3 percent slopes	
3629B—Perida loamy sand, 0 to 4 percent slopes	
M-W—Miscellaneous water	
W—Water	
Table 2.—Acreage and Proportionate Extent of the Soils	
Use and Management of the Soils	
Interpretive Ratings	
Rating Class Terms	
Numerical Ratings	
Crops and Pasture	
Climate	
Cropland Management Considerations	
Crop Yield Estimates	
Land Capability Classification	
Prime Farmland	
Windbreaks and Environmental Plantings	
Conservation Tree/Shrub Suitability Groups	
Forest Land Management	
Forest Land Harvest Equipment Considerations	
Forest Landing Considerations	
Forest Lond Site Proposition and Planting Considerations	
Forest Land Site Preparation and Planting Considerations	
Forest Habitat TypesRecreation	
Wildlife Habitat	
Engineering	
Building Site Development	
Sanitary Facilities	
Construction Materials	
Water Management	
Agricultural Waste Management	
Table 3.—Temperature and Precipitation	
Table 4.—Freeze Dates in Spring and Fall	
Table 5.—Growing Season	
Table 6.—Cropland Management Considerations	
Table 7.—Land Capability and Yields per Acre of Crops and Pasture	
Table 8.—Prime Farmland	
Table 9.—Windbreaks and Environmental Plantings	
Table 10.—Conservation Tree/Shrub Suitability Groups	
Table 11.—Forest Land Harvest Equipment Considerations	
Table 12.—Forest Haul Road Considerations	
Table 13.—Forest Log Landing Considerations	
Table 14.—Forest Land Site Preparation and Planting Considerations	
Table 15.—Forest Habitat Types	
Table 16a.—Recreational Development	
Table 16b.—Recreational Development	
Table 17.—Wildlife Habitat	

Table 18a.—Building Site Development	367
Table 18b.—Building Site Development	386
Table 19a.—Sanitary Facilities	410
Table 19b.—Sanitary Facilities	439
Table 20a.—Construction Materials	463
Table 20b.—Construction Materials	481
Table 21.—Water Management	
Table 22a.—Agricultural Waste Management	533
Table 22b.—Agricultural Waste Management	572
Soil Properties	605
Engineering Index Properties	605
Physical Properties	606
Chemical Properties	608
Water Features	
Soil Features	
Table 23.—Engineering Index Properties	
Table 24.—Physical Properties of the Soils	
Table 25.—Chemical Properties of the Soils	
Table 26.—Soil Moisture Status by Depth	
Table 27.—Flooding Frequency and Duration	
Table 28.—Ponding Frequency, Duration, and Depth	
Table 29.—Soil Features	
References	
Glossary	835

Issued 2006

Foreword

Soil surveys contain information that affects land use planning in survey areas. They include predictions of soil behavior for selected land uses. The surveys highlight soil limitations, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

Soil surveys are designed for many different users. Farmers, foresters, and agronomists can use the surveys to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the surveys to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the surveys to help them understand, protect, and enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. The information in this report is intended to identify soil properties that are used in making various land use or land treatment decisions. Statements made in this report are intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described, and information on specific uses is given. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Patricia S. Leavenworth State Conservationist Natural Resources Conservation Service

Soil Survey of Washburn County, Wisconsin, Subset of Major Land Resource Areas 90 and 91

By Fred J. Simeth, Natural Resources Conservation Service

Fieldwork and data development by Keith A. Anderson, Scot A. Haley, David J. Hvizdak, Mark A. Krupinski, Kenneth W. Lubich, James Martzke, Phillip D. Meyer, Fred J. Simeth, Jeff C. Talsky, Chanc L. Vogel, and Robert D. Weihrouch, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with

the Research Division of the College of Agricultural and Life Sciences, University of Wisconsin

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area, which is in Major Land Resource Areas 90 and 91. The majority of MLRA 90 occurs in Wisconsin, and the majority of MLRA 91 occurs in Minnesota. Major land resource areas (MLRAs) are geographically associated land resource units that share a common land use, elevation, topography, climate, water, soils, and vegetation (USDA, 1981). Washburn County, which is in northwestern Wisconsin (fig. 1), is a subset of MLRA 90, Central Wisconsin and Minnesota Thin Loess and Till, and MLRA 91, Wisconsin and Minnesota Sandy Outwash. Map unit design and the soil descriptions are based on documentation of the occurrence of each soil throughout the MLRAs.

The information in this survey includes a brief description of the soils and miscellaneous areas and interpretive tables showing soil properties and the subsequent effects on suitability, limitations, and management for specified uses.

During the fieldwork for this survey, soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landscape or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate map, however, soil

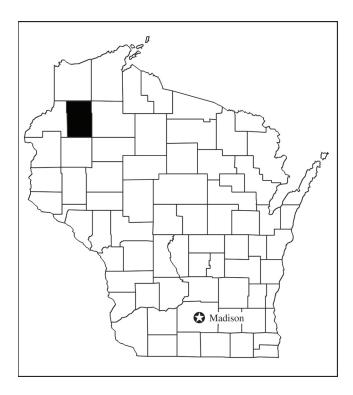


Figure 1.—Location of Washburn County in Wisconsin.

scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they observed. The maximum depth of observation was about 80 inches (6.7 feet). Soil scientists noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, soil reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Interpretations are modified as necessary to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For

example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a zone in which the soil moisture status is wet within certain depths in most years, but they cannot predict that this zone will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil scientists were denied access to a few tracts in the county. These areas were mapped using knowledge of soil patterns in the surrounding area and by aerial photo interpretation. The identification of soil properties and the delineations of soil boundaries are less accurate on these tracts than in areas where soil scientists had access to the land and could examine the soils. On the detailed soil maps, these tracts are labeled "Reduced Reliability, Access Denied."

Formation and Classification of the Soils

Soil is produced by the action of soil-forming processes on materials deposited or accumulated by geologic forces. The characteristics and properties of soil in a given area are determined by (1) the physical and mineralogical composition of the parent material; (2) the climate under which the soil material has accumulated and existed since accumulation; (3) the living organisms on and in the soil; (4) the relief, or lay of the land; and (5) the length of time the forces of soil formation have acted on the soil material (Jenny, 1941). The relative effect of each of these factors is reflected in the soil profile.

The interaction of these factors during the transformation of the parent material into soil generates complex physical, chemical, and biological processes that cause minerals to become weathered and organic matter to accumulate. Material in suspension or in solution moves downward through the soil to form definite layers, or horizons, in the soil. These layers—surface layer, subsurface layer, subsoil, and substratum—are defined in the Glossary.

All of the major factors of soil formation are interrelated. When one factor changes, the other four factors are affected. The following paragraphs describe the factors of soil formation as they relate to the soils in the survey area.

Parent Material

Parent material largely determines the physical and chemical properties of the soil, such as the capacity or ability of the soil to store water and nutrients for plants and the rate at which water can pass through the soil.

The soils in Washburn County formed in a wide variety of parent materials, including till, outwash, glaciolacustrine deposits, and alluvial deposits.

Till is unsorted, unstratified drift consisting mainly of clay, silt, and sand. It may contain gravel, cobbles, stones, or boulders. The till in the southern part of the county is dominantly sandy loam. Freeon and Magnor soils are examples of soils that formed in silty deposits and in the underlying loamy till. The loamy till is dense at a depth of 40 to 60 inches. This dense layer restricts the movement of water through the soil.

Fremstadt and Spoonerhill soils are examples of till soils that are dominantly sandy throughout. They have a thin loamy upper layer but have friable sandy till in the subsoil and substratum. These soils are in the central part of the county on moraines surrounded by sandy outwash soils.

Some of the soils in the northeastern part of the county that formed in till are underlain by basalt bedrock. Magroc and Metonga soils are examples of soils that formed in silty deposits underlain by till over the bedrock.

Outwash is sand, sand and gravel, or stratified sand and gravel deposited by water flowing from a melting glacier. Rosholt, Scott Lake, and Oesterle soils formed mostly in loamy deposits over sandy and gravelly outwash. Anigon, Antigo, Brill, Sconsin, Billyboy, and Poskin soils formed mostly in silty deposits over sandy and gravelly outwash.

Graycalm, Grettum, Mahtomedi, and Menahga soils are examples of outwash soils that are sandy or gravelly throughout. These soils are in the central and northwestern parts of the county.

Glaciolacustrine deposits are materials ranging from fine clay to sand derived from glaciers and deposited in glacial lakes, mainly by glacial meltwater. Many deposits are interbedded or laminated. In Washburn County, ice-walled lake plains formed as surrounding stagnant ice melted. These dish-shaped plateau formations are easy to recognize on topographic maps (Johnson, 2000). Barronett, Comstock, and Crystal Lake soils are examples of soils that formed in areas where these deposits are dominantly loamy. Cublake, Flink, and Sissabagama soils are examples of soils that formed in areas where loamy glaciolacustrine deposits are covered by deep deposits of sandy outwash.

Other glaciolacustrine deposits in Washburn County were laid down in areas once covered by Glacial Lake Grantsburg. Glacial Lake Grantsburg formed as the Grantsburg Sublobe of the Des Moines glacial advance dammed the southwest-flowing St. Croix River in the vicinity of Grantsburg in Burnett County. It is estimated that Glacial Lake Grantsburg lasted for about 80 to 100 years (Johnson, 2000). Dody, Karlsborg, and Perida soils are examples of soils that formed in areas where a thin layer of clayey Glacial Lake Grantsburg glaciolacustrine deposits were covered by moderately deep or deep sandy outwash or glaciolacustrine deposits. These soils occur in small pockets in the east-central part of the county.

Some of the soils in the county, such as Totagatic and Winterfield soils, formed in sandy postglacial alluvial deposits that were laid down as rivers overflowed and deposited fresh sediments on the flood plains. Fordum soils are examples of soils that formed in loamy alluvial deposits.

Climate

Climate influences soil formation by providing the moisture and temperatures necessary for the weathering of parent material. It also alters the parent material through the mechanical action of freezing and thawing.

Water dissolves and transfers soluble materials and nutrients to the lower parts of the soil. Reaction, or pH, is largely influenced by this process. Temperature affects the rate at which chemical reactions and biological processes proceed. These reactions and processes are slower at a lower temperature than at a higher temperature. Moisture and temperature also affect the kinds of plants and animals that grow on and in the soil. The accumulation and decomposition of organic material also are influenced by moisture and temperature.

Wind can affect the development of soil by adding or removing fine particles of soil or organic material. It also affects the moisture content of soils by influencing the rate of evaporation.

Climate can also have more localized effects. For example, north- and east-facing slopes tend to be cooler and wetter than south- and west-facing slopes. Depressional areas generally have cooler temperatures for a longer part of the year than summits and slopes of hills.

Washburn County has a cool, subhumid continental climate that favors the growth of trees and the formation of leached, acid soils with a thin, dark surface layer and a clay-enriched subsoil.

Living Organisms

Living organisms, such as plants, bacteria, fungi, insects, earthworms, nematodes, and rodents, influence the formation of soils. In addition to providing organic matter to the soil, their activities result in the development of soil structure and the formation of voids in the soil and thus encourage the transferral of clay and nutrients from the upper layers to the subsoil.

Plants generally have more influence than other living organisms on soil formation. Plant roots excrete substances that act on the parent material to bring nutrients or mineral substances into solution. These nutrients are translocated by plant roots upward to stems and leaves. When the plants die, minerals and nutrients are released to the upper soil layers. The organic acids formed from the decaying plant residue accelerate soil formation by reacting with rock and mineral constituents. Plants also affect soil formation by modifying the effects of climate—for example, by removing soil moisture through evapotransportation and by reducing the hazard of erosion.

Soil organisms decompose organic compounds and sequester nitrogen and other nutrients and make them available to plants. Organisms in the soil also enhance soil structure and porosity as they move through the soil. Roots and percolating water follow the channels created by animal activity.

Relief

Relief is an important factor in soil formation because it affects drainage, aeration, and erosion.

Because relief influences runoff and drainage, it can affect the types of vegetation present and the chemical changes on and in the soil. Soil profile development occurs most rapidly in well drained, gently sloping areas. Profile development is slower on steep slopes, where runoff is rapid and the rate of water infiltration is slower. Excessive runoff reduces the amount of water that is available for leaching the soil and for use by plants, and it can increase the hazard of erosion. Differences in relief can account for the formation of different soils in similar kinds of parent material. For example, some soils in the county formed in similar kinds of parent material but have different drainage classes because they are in different positions on the landscape.

Oesterle and other somewhat poorly drained soils have redoximorphic features in the subsoil because of seasonal wetness. These soils commonly are less sloping and have a slower rate of surface runoff than the well drained soils. They are also lower on the landscape and typically receive runoff from the adjacent uplands.

Minocqua and other poorly drained and very poorly drained soils are in the lowest positions on the landscape, where runoff is very slow or ponded. They have a grayish subsoil as a result of prolonged saturation and poor aeration. The surface layer generally is darker and thicker than that of upland soils because the moisture content is more favorable for the accumulation of organic material.

In areas where accumulations of decomposing plant residue are thicker because of excessive wetness, organic soils have formed. Beseman, Cathro, and Markey soils are examples of soils that formed in organic material 16 to 51 inches thick over mineral deposits. Greenwood and Seelyeville soils are examples of soils that formed in organic material more than 51 inches thick.

Time

Time is required for the formation of soil. In most cases, the longer the other factors of soil formation have been allowed to act on the parent material, the more profile development can occur. Soils that are forming in parent material that has been deposited relatively recently, such as Fordum, Totagatic, and Winterfield soils, show very little profile development.

In upland areas that support woodland vegetation, the soils that have developed are characterized by organic matter that was produced by the decay of leaves, limbs, and trunks. This decay produced acids that percolated through the surface litter and into the soil and increased the mobility of clay, organic material, and oxides, which allowed these substances to be leached away or to accumulate in the subsoil. Over a period of time, clay, organic matter, and oxides were removed from the surface layer and a thin

bleached subsurface layer formed just below it. The clay, organic matter, and oxides accumulated in the subsoil horizons below this subsurface layer in the form of thin films on individual soil particles, on peds, and along cracks and pores. Freeon soils are examples of soils that formed in an area of woodland vegetation.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories (Soil Survey Staff, 1999 and 2003). Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 1 shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Twelve soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is Alfisol.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is Aqualf (*Aqu*, meaning water, plus *alf*, from Alfisol).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; type of saturation; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is Epiaqualfs (*Epi*, meaning on or above, plus *aqualf*, the suborder of the Alfisols that has an aquic moisture regime).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic subgroup is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other taxonomic class. Each subgroup is identified by one or more adjectives preceding the name of the great group. An example is Mollic Epiagualfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, frigid Mollic Epiaqualfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. An example is the Barronett series.

The Official Series Descriptions (OSDs) provide the most current information about the series mapped in Washburn County. These descriptions are available on the Web at http://soils.usda.gov.

Table 1.--Classification of the Soils

Soil name	Family or higher taxonomic class
Aftad	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
	Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs
_	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
_	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
	Sandy, mixed, frigid Typic Endoaquods
usable	Sandy, mixed, frigid Histic Humaquepts
Sarronett	Fine-silty, mixed, superactive, frigid Mollic Epiaqualfs
Beseman	Loamy, mixed, dysic, frigid Terric Haplosaprists
Billyboy	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Oxyaquic Glossudalf
Bowstring	Euic, frigid Fluvaquentic Haplosaprists
	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs
_	Coarse-loamy, mixed, superactive, frigid Mollic Epiaqualfs
	Loamy, mixed, euic, frigid Terric Haplosaprists
	Coarse-loamy, mixed, superactive, frigid Inceptic Hapludalfs
	Fine-silty, mixed, superactive, frigid Aquic Glossudalfs
	Sandy, mixed, frigid Humic Dystrudepts
	Sandy, mixed, frigid Oxyaquic Haplorthods
_	Fine-silty, mixed, superactive, frigid Oxyaquic Glossudalfs
	Sandy, mixed, frigid Oxyaquic Haplorthods
	Sandy or sandy-skeletal, mixed, dysic, frigid Terric Haplosaprists
_	Clayey, smectitic, frigid Arenic Albaqualfs
	Coarse-loamy, mixed, superactive, frigid Udollic Epiaqualfs
	Sandy, mixed, frigid Typic Epiaquods
	Coarse-loamy, mixed, superactive, nonacid, frigid Mollic Fluvaquents Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
	Sandy, mixed, frigid Arenic Hapludalfs
	Mixed, frigid Typic Udipsamments
_	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
_	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
_	Mixed, frigid Lamellic Udipsamments
_	Mixed, frigid Typic Udipsamments
	Dysic, frigid Typic Haplohemists
	Mixed, frigid Lamellic Udipsamments
	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs
_	Very-fine, smectitic, frigid Oxyaquic Hapludalfs
_	Sandy, mixed, frigid Alfic Haplorthods
enroot	Mixed, frigid Oxyaquic Udipsamments
oxley	Dysic, frigid Typic Haplosaprists
upton	Euic, frigid Typic Haplosaprists
fagnor	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
lagroc	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
Mahtomedi	Mixed, frigid Typic Udipsamments
fanitowish	Sandy, mixed, frigid Oxyaquic Haplorthods
farkey	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists
feehan	Mixed, frigid Aquic Udipsamments
feenon	Clayey, smectitic, frigid Aquic Arenic Hapludalfs
_	Mixed, frigid Typic Udipsamments
_	Coarse-loamy, mixed, superactive, frigid Entic Haplorthods
_	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid, frigid Typic
	Endoaquepts
	Mixed, frigid Humaqueptic Psammaquents
	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Aquic Glossudalfs
	Coarse-loamy, mixed, superactive, frigid Alfic Haplorthods
	Coarse-loamy, mixed, superactive, frigid Alfic Epiaquods
	Sandy, isotic, frigid Typic Haplorthods
	Mixed, frigid Aquic Udipsamments
	Clayey, smectitic, frigid Arenic Hapludalfs
	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs
	Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Aquic Glossudalfs Fine-silty over sandy or sandy-skeletal, mixed, superactive, frigid Mollic Endoaqualfs
	rine-silly over samov or samov-skerelar, mixed, Suberactive, Iridio Mollic Endoadualis
ifle	Euic, frigid Typic Haplohemists Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs

Table 1.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class			
Scoba	 Coarse-loamy, mixed, superactive, frigid Haplic Glossudalfs			
Sconsin	Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, frigid Haplic Glossudalfs			
Scott Lake	Coarse-loamy, mixed, superactive, frigid Oxyaquic Glossudalfs			
Seelyeville	Euic, frigid Typic Haplosaprists			
Sissabagama	Mixed, frigid Oxyaquic Udipsamments			
Slimlake	Sandy, mixed, frigid Oxyaquic Dystrudepts			
Spoonerhill	Sandy, mixed, frigid Oxyaquic Dystrudepts			
Stanberry	Coarse-loamy, isotic, superactive, frigid Alfic Oxyaquic Haplorthods			
Stinnett	Coarse-loamy, mixed, superactive, frigid Aquic Glossudalfs			
Tacoosh	Loamy, mixed, euic, frigid Terric Haplohemists			
Tawas	Sandy or sandy-skeletal, mixed, euic, frigid Terric Haplosaprists			
Tipler	Coarse-loamy, mixed, superactive, frigid Alfic Oxyaquic Haplorthods			
Totagatic	Sandy, mixed, frigid Mollic Fluvaquents			
Vilas	Sandy, mixed, frigid Entic Haplorthods			
Winterfield	Mixed, frigid Aquic Udipsamments			
Worcester	Coarse-loamy, mixed, superactive, frigid Argic Endoaquods			
Wozny	Coarse-loamy, mixed, superactive, frigid Umbric Epiaqualfs			
Wurtsmith	Mixed, frigid Oxyaquic Udipsamments			

Soil Map Unit Descriptions

The map units delineated on the soil maps in this survey represent the soils or miscellaneous areas in the survey area. These soils or miscellaneous areas are listed as individual components in the map unit descriptions. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is provided in the tables (see Contents).

A map unit delineation on the soil maps represents an area on the landscape. It is identified by differences in the properties and taxonomic classification of components and by the percentage of each component in the map unit.

Components that are dissimilar, or contrasting, are identified in the map unit description. Dissimilar components are those that have properties and behavioral characteristics divergent enough from those of the major components to affect use or to require different management. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps.

Components that are similar to the major components (noncontrasting) are not identified in the map unit description. Similar components are those that have properties and behavioral characteristics similar enough to those of the major components that they do not affect use or require different management.

The presence of multiple components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol is used for each map unit on the soil maps. This symbol precedes the map unit name in the map unit descriptions. Each description includes general information about the unit. The map unit descriptions include representative values in feet and the months in which a wet zone (a zone in which the soil moisture status is wet) is highest and lowest in the soil profile and ponding is shallowest and deepest on the soil surface. The descriptions also include the frequency of flooding (if it occurs) and the months in which flooding is most frequent and least frequent. Tables 26, 27, and 28 provide a complete display of this data for every month of the year. The available water capacity given in each map unit description is calculated for all horizons in the upper 60 inches of the soil profile. The organic matter content displayed in each map unit description is calculated for all horizons in the upper 10 inches of the soil profile, except those that represent the surface duff layer on forested soils. Table 24 provides a complete display of available water capacity and organic matter content by horizon.

The principal hazards and limitations to be considered in planning for specific uses are described in other sections of this survey.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer or of the underlying layers, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer or of the underlying layers. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. The name of a soil phase commonly indicates a feature that affects use or management. For example, Stanberry sandy loam, 1 to 6 percent slopes, very stony, is a phase of the Stanberry series.

A map unit is named for the component or components that make up a dominant percentage of the map unit. Many map units consist of one dominant component. These map units are consociations. Stinnett silt loam, 0 to 4 percent slopes, very stony, is an example.

Some map units are made up of two or more dominant components. These map units are complexes or undifferentiated groups.

A *complex* consists of two or more components in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. Attempting to delineate the individual components of a complex would result in excessive clutter that could make the map illegible. The pattern and proportion of the components in a complex are somewhat similar in all areas. Haugen, very stony-Greenwood complex, 0 to 15 percent slopes, is an example.

An undifferentiated group is made up of two or more components that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the components in a mapped area are not uniform. An area can be made up of only one of the dominant components, or it can be made up of all of them. Seelyeville and Markey soils, 0 to 1 percent slopes, is an undifferentiated group in this survey area.

This survey includes miscellaneous areas. Such areas have little or no soil material and support little or no vegetation. Map unit 2015, Pits, is an example.

Table 2 gives the acreage and proportionate extent of each map unit. Other tables give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

3A—Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes, frequently flooded

Component Description

Totagatic and similar soils

Extent: 30 to 60 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.4 inches Content of organic matter in the upper 10 inches: 28.2 percent

Typical profile:

Oa—0 to 4 inches; muck

Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand

C—46 to 70 inches; sand C'g—70 to 80 inches; sand

Bowstring and similar soils

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Highly decomposed organic material that is stratified with thin layers of sandy or loamy material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 21.0 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 38 inches; muck Cg—38 to 47 inches; fine sand O'a—47 to 80 inches; muck

Ausable and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sandy alluvium with thin layers of organic material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 6.9 inches Content of organic matter in the upper 10 inches: 70.0 percent

Typical profile:

Oa—0 to 10 inches; muck Cg—10 to 60 inches; sand

Minor Dissimilar Components

Winterfield soils

Extent: 0 to 10 percent of the mapped areas

Moquah soils

Extent: 0 to 5 percent of the mapped areas

Water

Extent: 0 to 5 percent of the mapped areas

22A—Comstock silt loam, 0 to 3 percent slopes

Component Description

Comstock and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Footslopes and summits

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained Parent material: Silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 5.0 feet (September)

Ponding: None

Available water capacity to a depth of 60 inches: 11.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 15 inches; silt loam B/E—15 to 21 inches; silt loam Bt—21 to 34 inches; silt loam

BC—34 to 44 inches; stratified silt loam to very fine sand C—44 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Barronett soils

Extent: 0 to 10 percent of the mapped areas

Crystal Lake soils

Extent: 0 to 10 percent of the mapped areas

24A—Poskin silt loam, 0 to 3 percent slopes

Component Description

Poskin and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 8.7 inches Content of organic matter in the upper 10 inches: 2.8 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam E/B—12 to 19 inches; silt loam Bt1—19 to 36 inches; silt loam 2Bt2—36 to 39 inches; sandy loam

3C-39 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Brander soils

Extent: 0 to 10 percent of the mapped areas

Brill soils

Extent: 0 to 10 percent of the mapped areas

Rib soils

Extent: 0 to 10 percent of the mapped areas

27A—Scott Lake sandy loam, 0 to 3 percent slopes

Component Description

Scott Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 10 inches; sandy loam E/B—10 to 17 inches; sandy loam B/E—17 to 24 inches; sandy loam

2Bt—24 to 31 inches; gravelly loamy sand

2C-31 to 80 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Oesterle soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

28B—Haugen-Rosholt complex, 2 to 6 percent slopes, very stony

Component Description

Haugen, very stony, and similar soils

Extent: 20 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E—35 to 49 inches; sandy loam Bt—49 to 79 inches; gravelly sandy loam

Cd-79 to 80 inches; gravelly sandy loam

Haugen and similar soils

Extent: 15 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam B/F—35 to 49 inches; sandy loam

B/E—35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Rosholt, very stony, and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Rosholt and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Amery soils

Extent: 0 to 10 percent of the mapped areas

Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

Glendenning soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Oesterle soils

Extent: 0 to 5 percent of the mapped areas

28C—Haugen-Rosholt complex, 6 to 12 percent slopes, very stony

Component Description

Haugen, very stony, and similar soils

Extent: 25 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E—35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

Haugen and similar soils

Extent: 10 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent Typical profile:

Ap—0 to 7 inches; sandy loam

Bw1—7 to 15 inches; sandy loam Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

 $\ensuremath{\mathrm{B/E}}\xspace-35$ to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Rosholt, very stony, and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Rosholt and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Amery soils

Extent: 0 to 10 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

33B—Chetek sandy loam, 1 to 6 percent slopes

Component Description

Chetek and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; sandy loam Bt—10 to 16 inches; sandy loam

2Bt—16 to 20 inches; gravelly loamy sand

2C-20 to 60 inches; stratified very gravelly coarse sand to sand

Minor Dissimilar Components

Rosholt soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

33C—Chetek sandy loam, 6 to 12 percent slopes

Component Description

Chetek and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; sandy loam Bt—10 to 16 inches; sandy loam

2Bt—16 to 20 inches; gravelly loamy sand

2C-20 to 60 inches; stratified very gravelly coarse sand to sand

Minor Dissimilar Components

Rosholt soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

38A—Rosholt sandy loam, 0 to 2 percent slopes

Component Description

Rosholt and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Floodina: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C—34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

Chetek soils

Extent: 0 to 5 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

38B—Rosholt sandy loam, 2 to 6 percent slopes

Component Description

Rosholt and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Summits and backslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 10 percent of the mapped areas

Chetek soils

Extent: 0 to 10 percent of the mapped areas

Antigo soils

Extent: 0 to 5 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

38C—Rosholt sandy loam, 6 to 12 percent slopes

Component Description

Rosholt and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches

Content of organic matter in the upper 10 inches: 1.7 percent Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 10 percent of the mapped areas

Chetek soils

Extent: 0 to 10 percent of the mapped areas

Antigo soils

Extent: 0 to 5 percent of the mapped areas

38D—Rosholt sandy loam, 12 to 20 percent slopes

Component Description

Rosholt and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt-28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 10 percent of the mapped areas

Chetek soils

Extent: 0 to 10 percent of the mapped areas

Antigo soils

Extent: 0 to 5 percent of the mapped areas

42D—Amery sandy loam, 12 to 25 percent slopes, very stony

Component Description

Amery and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

Minor Dissimilar Components

Cress soils

Extent: 0 to 10 percent of the mapped areas

Haugen soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

43B—Antigo silt loam, 1 to 6 percent slopes

Component Description

Antigo and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits, backslopes, and shoulders

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches

Content of organic matter in the upper 10 inches: 1.9 percent Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Brill soils

Extent: 0 to 10 percent of the mapped areas

Sconsin soils

Extent: 0 to 10 percent of the mapped areas

Billyboy soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

43C—Antigo silt loam, 6 to 15 percent slopes

Component Description

Antigo and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 1.9 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

43D—Antigo silt loam, 15 to 30 percent slopes

Component Description

Antigo and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 1.9 percent

Typical profile:

Ap—0 to 9 inches; silt loam E—9 to 12 inches; silt loam B/E—12 to 19 inches; silt loam Bt1—19 to 28 inches; silt loam 2Bt2—28 to 31 inches; loam

2Bt3—31 to 33 inches; very gravelly sandy loam

3C-33 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 10 percent of the mapped areas

48A—Brill silt loam, 0 to 3 percent slopes

Component Description

Brill and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 8.0 inches Content of organic matter in the upper 10 inches: 2.3 percent

Typical profile:

Ap—0 to 7 inches; silt loam

E—7 to 11 inches; silt loam E/B—11 to 19 inches; silt loam Bt—19 to 34 inches; silt loam 2Bt—34 to 38 inches; loam

3C—38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Anigon soils

Extent: 0 to 10 percent of the mapped areas

Poskin soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

63A—Crystal Lake silt loam, 0 to 2 percent slopes

Component Description

Crystal Lake and similar soils

Extent: 85 to 100 percent of the mapped areas

Geomorphic setting: Kames; lake plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C-32 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Comstock soils

Extent: 0 to 15 percent of the mapped areas

63B—Crystal Lake silt loam, 2 to 6 percent slopes

Component Description

Crystal Lake and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits, backslopes, and shoulders

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap-0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches: silt loam

C—32 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Aftad soils

Extent: 0 to 10 percent of the mapped areas

Comstock soils

Extent: 0 to 10 percent of the mapped areas

63C—Crystal Lake silt loam, 6 to 12 percent slopes

Component Description

Crystal Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap-0 to 8 inches; silt loam E-8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C—32 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Aftad soils

63E—Crystal Lake silt loam, 20 to 35 percent slopes

Component Description

Crystal Lake and similar soils

Extent: 90 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 20 to 35 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 12.4 inches Content of organic matter in the upper 10 inches: 2.5 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 12 inches; silt loam B/E—12 to 20 inches; silt loam Bt—20 to 32 inches; silt loam

C-32 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Antigo soils

Extent: 0 to 10 percent of the mapped areas

64A—Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded

Component Description

Totagatic and similar soils

Extent: 45 to 65 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November, December)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.4 inches Content of organic matter in the upper 10 inches: 28.2 percent

Typical profile:

Oa—0 to 4 inches; muck

Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand C—46 to 70 inches; sand C´g—70 to 80 inches; sand

Winterfield and similar soils

Extent: 25 to 55 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 1 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, December)

Highest frequency of flooding: Frequent (April) Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 3.0 feet (September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 4.4 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A—0 to 7 inches; loamy sand C—7 to 60 inches; sand

Minor Dissimilar Components

Ausable soils

Extent: 0 to 10 percent of the mapped areas

Bowstring soils

Extent: 0 to 10 percent of the mapped areas

69B—Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony

Component Description

Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C—22 to 60 inches; stratified sand to very gravelly coarse sand

Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Pence soils

69C—Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony

Component Description

Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand

C—75 to 80 inches; loamy sand

Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 15 percent of the mapped areas

69E—Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony

Component Description

Keweenaw and similar soils

Extent: 20 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand

Bs1,Bs2—4 to 16 inches; loamy sand Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand

B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

Sayner and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

Vilas and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand B—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 15 percent of the mapped areas

74B—Vilas loamy sand, 0 to 6 percent slopes

Component Description

Vilas and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Croswell soils

Extent: 0 to 10 percent of the mapped areas

Karlin soils

Extent: 0 to 10 percent of the mapped areas

74C—Vilas loamy sand, 6 to 15 percent slopes

Component Description

Vilas and similar soils

Extent: 90 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Karlin soils

Extent: 0 to 10 percent of the mapped areas

74D—Vilas loamy sand, 15 to 30 percent slopes

Component Description

Vilas and similar soils

Extent: 90 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; outwash terraces Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 11 inches; loamy sand Bs2—11 to 23 inches; sand BC—23 to 32 inches; sand C—32 to 80 inches; sand

Minor Dissimilar Components

Karlin soils

Extent: 0 to 10 percent of the mapped areas

100B—Menahga sand, 0 to 6 percent slopes

Component Description

Menahga and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

Minor Dissimilar Components

Friendship soils

Extent: 0 to 15 percent of the mapped areas

Graycalm soils

Extent: 0 to 5 percent of the mapped areas

100C—Menahga sand, 6 to 12 percent slopes

Component Description

Menahga and similar soils

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Friendship soils

Extent: 0 to 3 percent of the mapped areas

100D—Menahga sand, 12 to 30 percent slopes

Component Description

Menahga and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

Minor Dissimilar Components

Gravcalm soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

127D—Amery-Rosholt complex, 12 to 20 percent slopes, very stony

Component Description

Amery and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

Rosholt and similar soils

Extent: 15 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 12 to 20 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 10 percent of the mapped areas

Mahtomedi soils

Haugen soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

127E—Amery-Rosholt complex, 20 to 45 percent slopes, very stony

Component Description

Amery and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 20 to 45 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 20 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.6 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; sandy loam E—4 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 5 percent of the mapped areas

156B—Magnor, very stony-Magnor complex, 0 to 4 percent slopes

Component Description

Magnor, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 11 inches; silt loam E/B—11 to 16 inches; silt loam B/E—16 to 21 inches; silt loam

2Bt1,2Bt2—21 to 39 inches; sandy loam 2Bt3—39 to 58 inches; fine sandy loam 2Cd—58 to 60 inches; fine sandy loam

Magnor and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; silt loam E—8 to 11 inches; silt loam E/B—11 to 16 inches; silt loam B/E—16 to 21 inches; silt loam

2Bt1,2Bt2—21 to 39 inches; sandy loam 2Bt3—39 to 58 inches; fine sandy loam 2Cd—58 to 60 inches; fine sandy loam

Minor Dissimilar Components

Freeon, very stony, soils

Extent: 0 to 15 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 10 percent of the mapped areas

157B—Freeon, very stony-Freeon complex, 2 to 6 percent slopes

Component Description

Freeon, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

Freeon and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

Ap—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

Minor Dissimilar Components

Magnor, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Magnor soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 4 percent of the mapped areas

157C—Freeon, very stony-Freeon complex, 6 to 12 percent slopes

Component Description

Freeon, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September) Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

Freeon and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September) Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

Ap—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

Minor Dissimilar Components

Magnor, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Magnor soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 4 percent of the mapped areas

160A—Oesterle sandy loam, 0 to 2 percent slopes

Component Description

Oesterle and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 7 inches; sandy loam E/B—7 to 11 inches; sandy loam Bt—11 to 31 inches; sandy loam

2C-31 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Minocqua soils

Extent: 0 to 10 percent of the mapped areas

Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

182B—Padus sandy loam, 0 to 6 percent slopes

Component Description

Padus and similar soils

Extent: 60 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces; eskers *Position on the landform:* Summits, backslopes, and shoulders

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 15 percent of the mapped areas

Antigo soils

Extent: 0 to 10 percent of the mapped areas

Tipler soils

Extent: 0 to 10 percent of the mapped areas

Martha soils

Extent: 0 to 5 percent of the mapped areas

182C—Padus sandy loam, 6 to 15 percent slopes

Component Description

Padus and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Eskers; outwash plains; stream terraces

Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 15 percent of the mapped areas

Antigo soils

Extent: 0 to 10 percent of the mapped areas

Martha soils

Extent: 0 to 5 percent of the mapped areas

192A—Worcester sandy loam, 0 to 3 percent slopes

Component Description

Worcester and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bhs—3 to 6 inches; sandy loam Bs—6 to 16 inches; sandy loam B/E—16 to 20 inches; sandy loam Bt1—20 to 32 inches; sandy loam

2Bt2—32 to 39 inches; gravelly loamy sand

2C—39 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Minocqua soils

Tipler soils

Extent: 0 to 15 percent of the mapped areas

193A—Minocqua muck, 0 to 2 percent slopes

Component Description

Minocqua and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains; depressions

and drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty and loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 6.2 inches Content of organic matter in the upper 10 inches: 18.6 percent

Typical profile:

Oe—0 to 4 inches; muck Eg—4 to 15 inches; silt loam 2Bg—15 to 28 inches; loam

3C-28 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cathro soils

Extent: 0 to 10 percent of the mapped areas

Oesterle soils

Extent: 0 to 10 percent of the mapped areas

Worcester soils

Extent: 0 to 10 percent of the mapped areas

Minocqua soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

215B—Pence sandy loam, 0 to 6 percent slopes

Component Description

Pence and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits, shoulders, and backslopes

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 15 percent of the mapped areas

Manitowish soils

Extent: 0 to 10 percent of the mapped areas

Sayner soils

Extent: 0 to 10 percent of the mapped areas

215C—Pence sandy loam, 6 to 15 percent slopes

Component Description

Pence and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 15 percent of the mapped areas

Sayner soils

215D—Pence sandy loam, 15 to 30 percent slopes

Component Description

Pence and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Backslopes and shoulders

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 15 percent of the mapped areas

Pelissier soils

Extent: 0 to 5 percent of the mapped areas

Savner soils

Extent: 0 to 5 percent of the mapped areas

315A—Rib silt loam, 0 to 2 percent slopes

Component Description

Rib and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on stream terraces;

drainageways and depressions on outwash plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.3 inches

Content of organic matter in the upper 10 inches: 4.8 percent Typical profile:

A—0 to 7 inches; silt loam Eg—7 to 10 inches; silt loam Btg1—10 to 32 inches; silt loam 2Btg2—32 to 35 inches; loam

3BC-35 to 37 inches; gravelly loamy sand

3C-37 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Cathro soils

Extent: 0 to 10 percent of the mapped areas

Poskin soils

Extent: 0 to 10 percent of the mapped areas

Rib soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

337A—Plover fine sandy loam, 0 to 3 percent slopes

Component Description

Plover and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Stratified loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)
Deepest depth to wet zone: 5.0 feet (September)

Ponding: None

Available water capacity to a depth of 60 inches: 9.8 inches Content of organic matter in the upper 10 inches: 2.5 percent Typical profile:

Ap—0 to 10 inches; fine sandy loam E—10 to 13 inches; fine sandy loam B/E—13 to 18 inches; fine sandy loam Bt—18 to 32 inches; fine sandy loam

C-32 to 60 inches; stratified fine sand to silt

Minor Dissimilar Components

Aftad soils

Extent: 0 to 10 percent of the mapped areas

Fenander soils

Extent: 0 to 10 percent of the mapped areas

Comstock soils

Extent: 0 to 5 percent of the mapped areas

Oesterle soils

368B—Mahtomedi-Cress complex, 2 to 6 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 30 to 80 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C—30 to 60 inches; gravelly sand

Cress and similar soils

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

368C—Mahtomedi-Cress complex, 6 to 12 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 20 to 80 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E-5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand C—30 to 60 inches; gravelly sand

Cress and similar soils

Extent: 15 to 60 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 10 percent of the mapped areas

Haugen soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

368D—Mahtomedi-Cress complex, 12 to 25 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 20 to 75 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand C—30 to 60 inches; gravelly sand

Cress and similar soils

Extent: 20 to 75 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Rosholt soils

371A—Croswell loamy sand, 0 to 3 percent slopes

Component Description

Croswell and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Lake terraces; lake plains; outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Pondina: None

Available water capacity to a depth of 60 inches: 4.2 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 1 inch; loamy sand E—1 to 7 inches; loamy sand Bs—7 to 16 inches; loamy sand BC—16 to 39 inches; sand C-39 to 60 inches; sand

Minor Dissimilar Components

Au Gres soils

Extent: 0 to 10 percent of the mapped areas

Vilas soils

Extent: 0 to 10 percent of the mapped areas

Savner soils

Extent: 0 to 5 percent of the mapped areas

380B—Cress-Rosholt complex, 2 to 6 percent slopes

Component Description

Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Rosholt and similar soils

Extent: 25 to 65 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Scott Lake soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 5 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

380C—Cress-Rosholt complex, 6 to 12 percent slopes

Component Description

Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Aftad soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

380D—Cress-Rosholt complex, 12 to 25 percent slopes

Component Description

Cress and similar soils

Extent: 35 to 75 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3-31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Rosholt and similar soils

Extent: 20 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 25 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

Ap—0 to 8 inches; sandy loam E—8 to 10 inches; sandy loam B/E—10 to 14 inches; sandy loam Bt—14 to 28 inches; sandy loam

2Bt—28 to 34 inches; gravelly loamy sand

2C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Antigo soils

Extent: 0 to 10 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

383B—Mahtomedi loamy sand, 0 to 6 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2-15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

Minor Dissimilar Components

Menahga soils

Extent: 0 to 30 percent of the mapped areas

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Lenroot soils

Extent: 0 to 5 percent of the mapped areas

383C—Mahtomedi loamy sand, 6 to 12 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E-5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

Minor Dissimilar Components

Menahga soils

Extent: 0 to 30 percent of the mapped areas

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Lenroot soils

383D—Mahtomedi loamy sand, 12 to 30 percent slopes

Component Description

Mahtomedi and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1-8 to 15 inches; gravelly coarse sand

Bw2—15 to 30 inches; gravelly sand

C-30 to 60 inches; gravelly sand

Minor Dissimilar Components

Menahga soils

Extent: 0 to 30 percent of the mapped areas

Graycalm soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Fremstadt soils

Extent: 0 to 5 percent of the mapped areas

396B—Friendship-Wurtsmith-Grayling complex, 0 to 6 percent slopes

Component Description

Friendship and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy eolian deposits

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 3.6 inches

Content of organic matter in the upper 10 inches: 0.7 percent Typical profile:

A—0 to 4 inches; sand Bw—4 to 29 inches; sand C—29 to 60 inches: sand

Wurtsmith and similar soils

Extent: 20 to 55 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy eolian deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.7 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A—0 to 6 inches; sand Bw—6 to 33 inches; sand C—33 to 60 inches; sand

Grayling and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

Minor Dissimilar Components

Meehan soils

Extent: 0 to 5 percent of the mapped areas

397A—Perchlake loamy fine sand, 0 to 2 percent slopes

Component Description

Perchlake and similar soils

Extent: 65 to 100 percent of the mapped areas Geomorphic setting: Lake plains; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy fine sand Bw—9 to 18 inches; fine sand

E&Bt—18 to 42 inches; sand, loamy sand 2Btg—42 to 46 inches; fine sandy loam

3C-46 to 60 inches; sand

Minor Dissimilar Components

Lino soils

Extent: 0 to 15 percent of the mapped areas

Meenon soils

Extent: 0 to 15 percent of the mapped areas

Newson soils

Extent: 0 to 10 percent of the mapped areas

399B—Grayling sand, 0 to 6 percent slopes

Component Description

Grayling and similar soils

Extent: 85 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

Minor Dissimilar Components

Friendship soils

Wurtsmith soils

Extent: 0 to 5 percent of the mapped areas

399C—Grayling sand, 6 to 12 percent slopes

Component Description

Grayling and similar soils

Extent: 93 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

Minor Dissimilar Components

Friendship similar soils

Extent: 0 to 5 percent of the mapped areas

Wurtsmith soils

Extent: 0 to 2 percent of the mapped areas

399D—Grayling sand, 12 to 30 percent slopes

Component Description

Grayling and similar soils

Extent: 93 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy eolian deposits

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 3 inches; sand Bw—3 to 15 inches; sand BC—15 to 23 inches; sand C—23 to 60 inches; sand

Minor Dissimilar Components

Friendship soils

Extent: 0 to 5 percent of the mapped areas

Wurtsmith soils

Extent: 0 to 2 percent of the mapped areas

405A—Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes

Component Description

Lupton and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous and woody organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 23.9 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 65 inches; muck

Cathro and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick underlain by loamy

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 16.6 inches Content of organic matter in the upper 10 inches: 72.5 percent

Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

Tawas and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over sandy deposits

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June)

Available water capacity to a depth of 60 inches: 14.2 inches Content of organic matter in the upper 10 inches: 55.0 percent

Typical profile:

Oa—0 to 31 inches; muck Cg—31 to 60 inches; fine sand

406A—Loxley mucky peat, 0 to 1 percent slopes

Component Description

Loxley and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 25.2 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 13 inches; mucky peat Oa—13 to 60 inches; muck

Minor Dissimilar Components

Seelyeville soils

Extent: 0 to 15 percent of the mapped areas

Uskabwanka soils

Extent: 0 to 10 percent of the mapped areas

Newson soils

Extent: 0 to 5 percent of the mapped areas

407A—Seelyeville and Markey soils, 0 to 1 percent slopes

Component Description

Seelyeville and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 23.9 inches

Content of organic matter in the upper 10 inches: 62.0 percent

Typical profile:

Oa-0 to 80 inches; muck

Markey and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick overlying sandy

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 14.4 inches Content of organic matter in the upper 10 inches: 70.0 percent

Typical profile:

Oa—0 to 32 inches; muck Cg—32 to 60 inches; sand

Minor Dissimilar Components

Newson soils

Extent: 0 to 15 percent of the mapped areas

Dawson soils

Extent: 0 to 10 percent of the mapped areas

410A—Seelyeville and Cathro soils, 0 to 1 percent slopes

Component Description

Seelyeville and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains and outwash plains; drainageways on

outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September, October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 23.9 inches

Content of organic matter in the upper 10 inches: 62.0 percent

Typical profile:

Oa-0 to 80 inches; muck

Cathro and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy or silty

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 16.6 inches

Content of organic matter in the upper 10 inches: 72.5 percent

Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

Minor Dissimilar Components

Greenwood soils

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Minocqua soils

Extent: 0 to 5 percent of the mapped areas

412A—Rifle and Tacoosh soils, 0 to 1 percent slopes

Component Description

Rifle and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November)

Available water capacity to a depth of 60 inches: 30.3 inches Content of organic matter in the upper 10 inches: 80.0 percent Typical profile:

Oi—0 to 4 inches; peat

Oe-4 to 60 inches; mucky peat

Tacoosh and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy or silty

deposits Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 22.2 inches Content of organic matter in the upper 10 inches: 87.0 percent Typical profile:

Oa-0 to 8 inches; muck

Oe-8 to 40 inches; mucky peat

Cg1—40 to 42 inches; very fine sandy loam

Cg2—42 to 60 inches; sandy loam

Minor Dissimilar Components

Greenwood soils

Extent: 0 to 10 percent of the mapped areas

Rib soils

Extent: 0 to 5 percent of the mapped areas

415A—Greenwood mucky peat, 0 to 1 percent slopes

Component Description

Greenwood and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on outwash plains

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 23.9 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 60 inches; mucky peat

Minor Dissimilar Components

Beseman soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 10 percent of the mapped areas

439B—Graycalm-Menahga complex, 0 to 6 percent slopes

Component Description

Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt—35 to 60 inches; stratified sand to loamy sand

Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand Bw—2 to 25 inches; sand C—25 to 80 inches: sand

Minor Dissimilar Components

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 8 percent of the mapped areas

Grettum soils

Extent: 0 to 5 percent of the mapped areas

Wurtsmith soils

Extent: 0 to 5 percent of the mapped areas

439C—Graycalm-Menahga complex, 6 to 12 percent slopes

Component Description

Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt—35 to 60 inches; stratified sand to loamy sand

Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand B—2 to 25 inches; sand C—25 to 80 inches; sand

Minor Dissimilar Components

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

439D—Graycalm-Menahga complex, 12 to 30 percent slopes

Component Description

Graycalm and similar soils

Extent: 40 to 80 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 22 inches; sand E—22 to 35 inches; sand

E&Bt-35 to 60 inches; stratified sand to loamy sand

Menahga and similar soils

Extent: 20 to 60 percent of the mapped areas

Geomorphic setting: Outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent

Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; loamy sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

Minor Dissimilar Components

Mahtomedi soils

Extent: 0 to 15 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

441C—Freeon, very stony-Cathro complex, 0 to 15 percent slopes

Component Description

Freeon and similar soils

Extent: 50 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 9.1 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 4 inches; silt loam E/B—4 to 19 inches; silt loam 2B/E—19 to 39 inches; sandy loam 2Bt—39 to 53 inches; sandy loam 2BCd—53 to 80 inches; sandy loam

Cathro and similar soils

Extent: 10 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material underlain by loamy deposits

Flooding: None

Wet zone: At the surface all year

Months in which ponding does not occur: January, February, July, August, September,

October, December

Deepest ponding: 0.5 foot (March, April, May, June, November) Available water capacity to a depth of 60 inches: 16.6 inches Content of organic matter in the upper 10 inches: 72.5 percent Typical profile:

Oa—0 to 28 inches; muck Cg1—28 to 49 inches; loam Cg2—49 to 60 inches; sandy loam

Minor Dissimilar Components

Amery soils

Extent: 0 to 15 percent of the mapped areas

Magnor soils

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 10 percent of the mapped areas

Haugen soils

Extent: 0 to 10 percent of the mapped areas

442C—Haugen, very stony-Greenwood complex, 0 to 15 percent slopes

Component Description

Haugen and similar soils

Extent: 30 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Greenwood and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

Minor Dissimilar Components

Amery soils

Extent: 0 to 15 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 6 percent of the mapped areas

Magnor soils

Extent: 0 to 5 percent of the mapped areas

443D—Amery, very stony-Greenwood complex, 0 to 35 percent slopes

Component Description

Amery and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes and shoulders

Slope range: 15 to 35 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw—3 to 22 inches; sandy loam E/B—22 to 34 inches; sandy loam

B/E—34 to 41 inches; gravelly sandy loam Bt1—41 to 57 inches; gravelly sandy loam

Bt2—57 to 71 inches; sandy loam Cd—71 to 80 inches; sandy loam

Greenwood and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

Minor Dissimilar Components

Haugen soils

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 15 percent of the mapped areas

Magnor soils

Extent: 0 to 10 percent of the mapped areas

461A—Bowstring muck, 0 to 1 percent slopes, frequently flooded

Component Description

Bowstring and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Highly decomposed organic material that is stratified with thin layers

of sandy or loamy material

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August, December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 21.1 inches

Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oa—0 to 38 inches; muck Cg—38 to 47 inches; fine sand O'a—47 to 80 inches; muck

Minor Dissimilar Components

Fordum soils

Extent: 0 to 15 percent of the mapped areas

Totagatic soils

Extent: 0 to 10 percent of the mapped areas

484A—Greenwood and Beseman soils, 0 to 1 percent slopes

Component Description

Greenwood and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi—0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

Beseman and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches Content of organic matter in the upper 10 inches: 50.0 percent

Typical profile:

Oa—0 to 36 inches; muck Cg—36 to 60 inches; silt loam

Minor Dissimilar Components

Seelyeville soils

Extent: 0 to 15 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

Minocqua soils

Extent: 0 to 3 percent of the mapped areas

495B—Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes

Component Description

Karlsborg and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

Grettum and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

Perida and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

495C—Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes

Component Description

Karlsborg and similar soils

Extent: 25 to 60 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

Grettum and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

Perida and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

495D—Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes

Component Description

Karlsborg and similar soils

Extent: 30 to 50 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.7 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Bt—28 to 48 inches; clay 3C—48 to 80 inches; sand

Grettum and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

Perida and similar soils

Extent: 10 to 40 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Backslopes and shoulders

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 15 percent of the mapped areas

497A—Meenon loamy sand, 0 to 3 percent slopes

Component Description

Meenon and similar soils

Extent: 60 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April, May)

Deepest depth to wet zone: More than 6.7 feet (July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 28 inches; sand 2Btg—28 to 41 inches; clay 3C—41 to 80 inches; sand

Minor Dissimilar Components

Karlsborg soils

Extent: 0 to 15 percent of the mapped areas

Chelmo soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

Extent: 0 to 5 percent of the mapped areas

Perchlake soils

Extent: 0 to 5 percent of the mapped areas

Dody soils

Extent: 0 to 5 percent of the mapped areas

515A—Manitowish sandy loam, 0 to 3 percent slopes

Component Description

Manitowish and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.2 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 4 inches; sandy loam Bs1—4 to 16 inches; sandy loam

2Bs2—16 to 19 inches; loamy coarse sand

2C—19 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 15 percent of the mapped areas

Wormet soils

Extent: 0 to 10 percent of the mapped areas

Sayner soils

Extent: 0 to 5 percent of the mapped areas

Worcester soils

Extent: 0 to 5 percent of the mapped areas

521A—Dody muck, 0 to 2 percent slopes

Component Description

Dody and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on lake plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (March, April, May, November, December)

Deepest depth to wet zone: 2.5 feet (August, September)

Months in which ponding does not occur: January, February, March, June, July,

August, September, December

Deepest ponding: 0.5 foot (April, May, October, November) Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 11.5 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 9 inches; sand Bw—9 to 20 inches; fine sand Bg—20 to 23 inches; loamy sand 2Btg—23 to 47 inches; clay 3C1-47 to 58 inches; loamy sand 3C2-58 to 80 inches; sand

Minor Dissimilar Components

Chelmo soils

Extent: 0 to 15 percent of the mapped areas

Meenon soils

Extent: 0 to 10 percent of the mapped areas

Markey soils

Extent: 0 to 5 percent of the mapped areas

524E—Rock outcrop-Frogcreek-Metonga complex, 2 to 45 percent slopes, very stony

Component Description

Rock outcrop

Extent: 15 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Summits and shoulders

Slope range: 2 to 45 percent

Flooding: None Ponding: None

Frogcreek and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September)

Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam

3Cd—46 to 80 inches; gravelly loamy sand

Metonga and similar soils

Extent: 10 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Parent material: Silty or loamy eolian mantle and in underlying loamy till underlain by

igneous or metamorphic bedrock

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.2 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A-0 to 3 inches; silt loam

E—3 to 4 inches; very fine sandy loam Bs—4 to 25 inches; very fine sandy loam 2Bw—25 to 28 inches; sandy loam

3R—28 to 80 inches; unweathered bedrock

Minor Dissimilar Components

Magroc soils

Extent: 0 to 15 percent of the mapped areas

Stanberry soils

Extent: 0 to 15 percent of the mapped areas

Stinnett soils

Extent: 0 to 15 percent of the mapped areas

542B—Haugen, very stony-Haugen complex, 2 to 6 percent slopes

Component Description

Haugen, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

Haugen and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches

Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

Minor Dissimilar Components

Freeon, very stony, soils

Extent: 0 to 15 percent of the mapped areas

Freeon soils

Extent: 0 to 15 percent of the mapped areas

Glendenning, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Glendenning soils

Extent: 0 to 10 percent of the mapped areas

Capitola soils

Extent: 0 to 10 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

542C—Haugen, very stony-Haugen complex, 6 to 12 percent slopes

Component Description

Haugen, very stony, and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; sandy loam Bw1—4 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam

E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam

Cd—79 to 80 inches; gravelly sandy loam

Haugen and similar soils

Extent: 5 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Moderately well drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (March, April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 6.5 inches Content of organic matter in the upper 10 inches: 1.6 percent

Typical profile:

Ap—0 to 7 inches; sandy loam Bw1—7 to 15 inches; sandy loam

Bw2—15 to 23 inches; gravelly sandy loam E/B—23 to 35 inches; gravelly sandy loam

B/E-35 to 49 inches; sandy loam

Bt—49 to 79 inches; gravelly sandy loam Cd—79 to 80 inches; gravelly sandy loam

Minor Dissimilar Components

Amery, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Amery soils

Extent: 0 to 10 percent of the mapped areas

Freeon, very stony, soils

Extent: 0 to 10 percent of the mapped areas

Freeon soils

Extent: 0 to 10 percent of the mapped areas

Crystal Lake soils

Extent: 0 to 5 percent of the mapped areas

Glendenning, very stony, soils

Extent: 0 to 5 percent of the mapped areas

Glendenning soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils

Extent: 0 to 5 percent of the mapped areas

543B—Anigon silt loam, 2 to 6 percent slopes

Component Description

Anigon and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; silt loam E—10 to 14 inches; silt loam B/E—14 to 20 inches; silt loam Bt1—20 to 30 inches; silt loam 2Bt2—30 to 34 inches; sandy loam

3C—34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Brill soils

Extent: 0 to 15 percent of the mapped areas

Rosholt soils

Extent: 0 to 10 percent of the mapped areas

Poskin soils

Extent: 0 to 5 percent of the mapped areas

543C2—Anigon silt loam, 6 to 12 percent slopes, eroded

Component Description

Anigon and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Backslopes and shoulders

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loess or silty alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; silt loam E—10 to 14 inches; silt loam B/E—14 to 20 inches; silt loam Bt1—20 to 30 inches; silt loam 2Bt2—30 to 34 inches; sandy loam

3C-34 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Rosholt soils

Extent: 0 to 15 percent of the mapped areas

Brill soils

Extent: 0 to 10 percent of the mapped areas

544F—Menahga and Mahtomedi soils, 30 to 45 percent slopes

Component Description

Menahga and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 0.3 percent Typical profile:

Oi—0 to 1 inch; slightly decomposed plant material

A—1 to 2 inches; sand Bw—2 to 25 inches; sand C—25 to 80 inches; sand

Mahtomedi and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains Position on the landform: Shoulders and backslopes

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained Parent material: Sandy outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 2.7 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 5 inches; loamy sand

E—5 to 8 inches; sand

Bw1—8 to 15 inches; gravelly coarse sand Bw2—15 to 30 inches; gravelly sand

C—30 to 60 inches; gravelly sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Grettum soils

Extent: 0 to 10 percent of the mapped areas

555A—Fordum silt loam, 0 to 2 percent slopes, frequently flooded

Component Description

Fordum and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty or loamy alluvium underlain by sandy and gravelly alluvium Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 7.2 inches Content of organic matter in the upper 10 inches: 7.4 percent Typical profile:

A—0 to 6 inches; silt loam Cg1—6 to 18 inches; silt loam

Cg2—18 to 30 inches; fine sandy loam

2Cg-30 to 60 inches; sand

Minor Dissimilar Components

Somewhat poorly drained soils

Extent: 0 to 15 percent of the mapped areas

Bowstring soils

Extent: 0 to 10 percent of the mapped areas

Moppet soils

Extent: 0 to 5 percent of the mapped areas

574B—Sayner loamy sand, 0 to 6 percent slopes

Component Description

Sayner and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; eskers; outwash terraces

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches
Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 10 percent of the mapped areas

Rubicon soils

Extent: 0 to 10 percent of the mapped areas

Moderately well drained soils

Extent: 0 to 10 percent of the mapped areas

574C—Sayner loamy sand, 6 to 15 percent slopes

Component Description

Sayner and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Eskers; outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand Bs2—7 to 14 inches; sand

BC-14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 10 percent of the mapped areas

Rubicon soils

Extent: 0 to 10 percent of the mapped areas

574E—Sayner loamy sand, 15 to 45 percent slopes

Component Description

Sayner and similar soils

Extent: 85 to 100 percent of the mapped areas Geomorphic setting: Eskers; outwash plains

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Excessively drained

Parent material: Stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 3.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 2 inches; loamy sand E—2 to 4 inches; loamy sand Bs1—4 to 7 inches; loamy sand

Bs2-7 to 14 inches; sand

BC—14 to 22 inches; gravelly sand

C-22 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Pence soils

Extent: 0 to 10 percent of the mapped areas

Rubicon soils

Extent: 0 to 10 percent of the mapped areas

579B—Parkfalls sandy loam, 0 to 4 percent slopes, very stony

Component Description

Parkfalls and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 30 to 50 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.9 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 8 inches; sandy loam Bs—8 to 17 inches; sandy loam E/B—17 to 30 inches; sandy loam Bt—30 to 33 inches; sandy loam BCd—33 to 48 inches; sandy loam 2Cd—48 to 80 inches; loamy sand

Minor Dissimilar Components

Wozny soils

Extent: 0 to 10 percent of the mapped areas

Stanberry soils

Extent: 0 to 10 percent of the mapped areas

Stinnett soils

Extent: 0 to 5 percent of the mapped areas

600A—Haplosaprists and Psammaquents, 0 to 2 percent slopes

Component Description

Haplosaprists and similar soils

Extent: 0 to 100 percent of the mapped areas

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Flooding: None

Wet zone: At the surface all year Ponding depth: 1.0 foot all year

General description: Haplosaprists are areas of very poorly drained organic soils that have been altered for use as cranberry beds. The alterations include excavating the organic material, filling with sand, and constructing ditches and dikes.

Psammaguents and similar soils

Extent: 0 to 100 percent of the mapped areas

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Flooding: None

Wet zone: At the surface all year Ponding depth: 1.0 foot all year

General description: Psammaquents are areas of poorly drained and very poorly drained sandy soils that have been altered for use as cranberry beds. The alterations include land leveling and constructing ditches and dikes.

Minor Dissimilar Components

Dikes

Extent: 0 to 15 percent of the mapped areas

Poorly drained and very poorly drained loamy soils

Extent: 0 to 5 percent of the mapped areas

615B—Cress sandy loam, 0 to 6 percent slopes

Component Description

Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Slimlake soils

Extent: 0 to 5 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

615C—Cress sandy loam, 6 to 12 percent slopes

Component Description

Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

615D—Cress sandy loam, 12 to 30 percent slopes

Component Description

Cress and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Chetek soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 5 percent of the mapped areas

623A—Capitola muck, 0 to 2 percent slopes, very stony

Component Description

Capitola and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Depressions and drainageways on moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 20 to 40 inches to dense material

Drainage class: Very poorly drained

Parent material: Silty or loamy alluvium underlain by dense loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 7.5 inches Content of organic matter in the upper 10 inches: 35.3 percent Typical profile:

Oa—0 to 5 inches; muck A—5 to 7 inches; silt loam Bg—7 to 22 inches; silt loam 2Btg—22 to 33 inches; sandy loam 2Cd—33 to 60 inches; sandy loam

Minor Dissimilar Components

Cathro soils

Extent: 0 to 15 percent of the mapped areas

Pesabic soils

Extent: 0 to 10 percent of the mapped areas

Beseman soils

Extent: 0 to 5 percent of the mapped areas

Magnor soils

Extent: 0 to 5 percent of the mapped areas

Capitola soils that are flooded for brief periods

Extent: 0 to 5 percent of the mapped areas

Cebana soils

Extent: 0 to 5 percent of the mapped areas

624A—Ossmer silt loam, 0 to 3 percent slopes

Component Description

Ossmer and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.9 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 6 inches; silt loam
E/B—6 to 11 inches; silt loam
B/E—11 to 26 inches; silt loam
2Bt1—26 to 34 inches; loam
2Bt2—34 to 38 inches; sandy loam

3C-38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Billyboy soils

Extent: 0 to 10 percent of the mapped areas

Annriver soils

Extent: 0 to 10 percent of the mapped areas

Maincreek soils

Extent: 0 to 10 percent of the mapped areas

Sconsin soils

Extent: 0 to 5 percent of the mapped areas

632A—Aftad fine sandy loam, 0 to 2 percent slopes

Component Description

Aftad and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam

C—41 to 60 inches; stratified fine sand to silt

Minor Dissimilar Components

Plover soils

Extent: 0 to 15 percent of the mapped areas

Comstock soils

Extent: 0 to 10 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

632B—Aftad fine sandy loam, 2 to 6 percent slopes

Component Description

Aftad and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains; stream terraces

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam C—41 to 60 inches; stratified fine sand to silt

Minor Dissimilar Components

Plover soils

Extent: 0 to 15 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

Crystal Lake soils

Extent: 0 to 5 percent of the mapped areas

632C—Aftad fine sandy loam, 6 to 12 percent slopes

Component Description

Aftad and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Lake plains; stream terraces Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mostly loamy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 9.3 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; fine sandy loam E/B—10 to 29 inches; fine sandy loam B/E—29 to 36 inches; fine sandy loam Bt—36 to 41 inches; fine sandy loam

C-41 to 60 inches; stratified fine sand to silt

Minor Dissimilar Components

Crystal Lake soils

Extent: 0 to 15 percent of the mapped areas

Scott Lake soils

Extent: 0 to 5 percent of the mapped areas

Plover soils

Extent: 0 to 5 percent of the mapped areas

633F—Pence and Padus soils, 30 to 45 percent slopes

Component Description

Pence and similar soils

Extent: 0 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A-0 to 3 inches; sandy loam E-3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Padus and similar soils

Extent: 0 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Backslopes and shoulders

Slope range: 30 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 6.0 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 26 inches; sandy loam B/E—26 to 38 inches; sandy loam

2C-38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Sayner soils

Extent: 0 to 10 percent of the mapped areas

648B—Sconsin silt loam, 1 to 6 percent slopes

Component Description

Sconsin and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Outwash terraces; stream terraces; outwash plains

Position on the landform: Summits

Slope range: 1 to 6 percent

Depth to restrictive layer(s): 20 to 38 inches to dense material

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, May, June,

July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 7.9 inches Content of organic matter in the upper 10 inches: 1.5 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 5 inches; silt loam Bw—5 to 10 inches; silt loam

E'—10 to 18 inches; silt loam E/B—18 to 27 inches; silt loam

2B/E-27 to 34 inches; loam

2BCd—34 to 38 inches; sandy loam

3C-38 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Antigo soils

Extent: 0 to 15 percent of the mapped areas

Maincreek soils

Extent: 0 to 15 percent of the mapped areas

Billyboy soils

Extent: 0 to 5 percent of the mapped areas

Ossmer soils

Extent: 0 to 5 percent of the mapped areas

670C—Keweenaw-Pence complex, 6 to 15 percent slopes, stony

Component Description

Keweenaw and similar soils

Extent: 30 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand

C—75 to 80 inches; loamy sand

Pence and similar soils

Extent: 25 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 15 percent of the mapped areas

Sayner soils

Extent: 0 to 15 percent of the mapped areas

670E—Keweenaw-Pence complex, 15 to 45 percent slopes, stony

Component Description

Keweenaw and similar soils

Extent: 35 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam
Bs3—16 to 20 inches; loamy sand
E´—20 to 27 inches; loamy sand
E/B—27 to 43 inches; sand
B/E—43 to 75 inches; loamy sand
C—75 to 80 inches; loamy sand

Pence and similar soils

Extent: 25 to 35 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 15 percent of the mapped areas

Sayner soils

Extent: 0 to 15 percent of the mapped areas

671B—Spoonerhill, stony-Spoonerhill complex, 2 to 6 percent slopes

Component Description

Spoonerhill, stony, and similar soils

Extent: 5 to 95 percent of the mapped areas

Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam 2Bw2—12 to 16 inches; gravelly loamy sand

2E/B—16 to 34 inches; loamy sand

2C1-34 to 46 inches; sand

2C2-46 to 80 inches; gravelly loamy sand

Spoonerhill and similar soils

Extent: 5 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A-0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam

2Bw2—12 to 16 inches; gravelly loamy sand

2E/B—16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2—46 to 80 inches; gravelly loamy sand

Minor Dissimilar Components

Fremstadt soils

Extent: 0 to 10 percent of the mapped areas

Slimlake soils

Extent: 0 to 10 percent of the mapped areas

Grettum soils

Extent: 0 to 5 percent of the mapped areas

Haugen soils

Extent: 0 to 5 percent of the mapped areas

Cress soils

Extent: 0 to 5 percent of the mapped areas

Glendenning soils

Extent: 0 to 5 percent of the mapped areas

680B—Stanberry-Pence complex, 2 to 6 percent slopes, stony

Component Description

Stanberry, stony, and similar soils

Extent: 50 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand 2Cd—42 to 80 inches; loamy sand

Pence, stony, and similar soils

Extent: 20 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam

2BC-15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Parkfalls soils that are stony

Extent: 0 to 10 percent of the mapped areas

Keweenaw soils that are stony

Extent: 0 to 5 percent of the mapped areas

683A—Tipler sandy loam, 0 to 3 percent slopes

Component Description

Tipler and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.7 percent

Typical profile:

A—0 to 3 inches; sandy loam
E—3 to 5 inches; sandy loam
Bs—5 to 19 inches; sandy loam
B/E—19 to 26 inches; sandy loam
Bt—26 to 33 inches; sandy loam

2C-33 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Padus soils

Extent: 0 to 10 percent of the mapped areas

Worcester soils

Extent: 0 to 10 percent of the mapped areas

706A—Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded

Component Description

Winterfield and similar soils

Extent: 50 to 80 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 1 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, December)

Highest frequency of flooding: Frequent (April) Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 3.0 feet (September, October)

Ponding: None

Available water capacity to a depth of 60 inches: 5.0 inches Content of organic matter in the upper 10 inches: 2.2 percent

Typical profile:

A-0 to 7 inches; very fine sandy loam

C-7 to 60 inches; sand

Totagatic and similar soils

Extent: 15 to 40 percent of the mapped areas

Geomorphic setting: Flood plains Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly sandy alluvium

Lowest frequency of flooding (if it occurs): Rare (January, February, July, August,

December)

Highest frequency of flooding: Frequent (April, May)

Shallowest depth to wet zone: At the surface (May, November, December)

Deepest depth to wet zone: More than 6.7 feet (April)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 4.4 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 4 inches; fine sandy loam Bw1—4 to 8 inches; loamy fine sand Bw2—8 to 17 inches; fine sand Cg1—17 to 28 inches; fine sand Cg2—28 to 46 inches; sand C—46 to 70 inches; sand C´g—70 to 80 inches; sand

Minor Dissimilar Components

Bowstring soils

Extent: 0 to 10 percent of the mapped areas

Moquah soils

Extent: 0 to 10 percent of the mapped areas

Pelkie soils

Extent: 0 to 5 percent of the mapped areas

724A—Rib-Rock outcrop complex, 0 to 2 percent slopes

Component Description

Rib and similar soils

Extent: 40 to 90 percent of the mapped areas

Geomorphic setting: Drainageways on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Silty alluvium over loamy alluvium underlain by stratified sandy and

gravelly outwash Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.3 inches Content of organic matter in the upper 10 inches: 4.8 percent

Typical profile:

A—0 to 7 inches; silt loam Eg—7 to 10 inches; silt loam Btg—10 to 32 inches; silt loam 2Btg—32 to 35 inches; loam

3BC—35 to 37 inches; gravelly loamy sand

3C-37 to 60 inches; stratified sand to very gravelly coarse sand

Rock outcrop

Extent: 3 to 15 percent of the mapped areas

Geomorphic setting: Drainageways on disintegration moraines

Minor Dissimilar Components

Barronett soils

Extent: 0 to 15 percent of the mapped areas

Poskin soils

Extent: 0 to 15 percent of the mapped areas

Cathro soils

Extent: 0 to 10 percent of the mapped areas

Magroc soils

Extent: 0 to 10 percent of the mapped areas

726B—Sissabagama loamy sand, 0 to 6 percent slopes

Component Description

Sissabagama and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy deposits underlain by stratified sandy and loamy lacustrine

deposits Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 5.7 inches Content of organic matter in the upper 10 inches: 2.0 percent

Typical profile:

Ap—0 to 10 inches; loamy sand Bw—10 to 31 inches; sand E&Bt—31 to 45 inches; sand

2C—45 to 80 inches; stratified very fine sand to silt

Minor Dissimilar Components

Grettum soils

Extent: 0 to 15 percent of the mapped areas

Wurtsmith soils

Extent: 0 to 5 percent of the mapped areas

Perida soils

Extent: 0 to 5 percent of the mapped areas

733A—Wozny muck, 0 to 2 percent slopes, very stony

Component Description

Wozny and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Loess or silty alluvium and loamy alluvium underlain by dense sandy

till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C-37 to 56 inches; stratified sandy loam to gravelly loam

3Cd—56 to 80 inches; loamy sand

Minor Dissimilar Components

Cathro soils

Extent: 0 to 15 percent of the mapped areas

Parkfalls soils

Extent: 0 to 10 percent of the mapped areas

Stinnett soils

Extent: 0 to 10 percent of the mapped areas

771A—Lenroot loamy sand, 0 to 3 percent slopes

Component Description

Lenroot and similar soils

Extent: 75 to 95 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained Parent material: Sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Pondina: None

Available water capacity to a depth of 60 inches: 2.8 inches Content of organic matter in the upper 10 inches: 0.5 percent

Typical profile:

A—0 to 4 inches; loamy sand Bw1—4 to 8 inches; loamy sand

Bw2—8 to 14 inches; loamy coarse sand BC—14 to 21 inches; gravelly coarse sand

C-21 to 80 inches; stratified coarse sand to gravelly coarse sand

Minor Dissimilar Components

Mahtomedi soils

Extent: 5 to 15 percent of the mapped areas

Meehan soils

Extent: 0 to 10 percent of the mapped areas

827A—Scoba sandy loam, 0 to 3 percent slopes

Component Description

Scoba and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces; lake plains

Position on the landform: Summits Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 2.3 percent

Typical profile:

Ap—0 to 9 inches; sandy loam

E/B—9 to 16 inches; sandy loam B/E—16 to 20 inches; sandy loam Bt—20 to 26 inches; sandy loam 2Bt—26 to 31 inches; loamy sand

2C-31 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Rosholt soils

Extent: 0 to 15 percent of the mapped areas

Aftad soils

Extent: 0 to 10 percent of the mapped areas

Plover soils

Extent: 0 to 5 percent of the mapped areas

Oesterle soils

Extent: 0 to 5 percent of the mapped areas

853C—Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony

Component Description

Frogcreek and similar soils

Extent: 35 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam
3Cd—46 to 80 inches; gravelly loamy sand

Stinnett and similar soils

Extent: 15 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam

E—4 to 7 inches; silt

E/B—7 to 18 inches; silt

B/E—18 to 29 inches; silt loam

2Bt1-29 to 34 inches; loam

2Bt2—34 to 41 inches; sandy loam

3C-41 to 55 inches; loamy sand

3Cd—55 to 80 inches; loamy sand

Wozny soils

Extent: 15 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December

Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C—37 to 56 inches; stratified sandy loam to gravelly loam

3Cd-56 to 80 inches; loamy sand

Minor Dissimilar Components

Stanberry soils

Extent: 0 to 10 percent of the mapped areas

Cathro soils

Extent: 0 to 5 percent of the mapped areas

856B—Stinnett silt loam, 0 to 4 percent slopes, very stony

Component Description

Stinnett and similar soils

Extent: 70 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 7 inches; silt E/B—7 to 18 inches; silt B/E—18 to 29 inches; silt loam 2Bt1—29 to 34 inches; loam 2Bt2—34 to 41 inches; sandy loam 3C—41 to 55 inches; loamy sand 3Cd—55 to 80 inches; loamy sand

Minor Dissimilar Components

Frogcreek soils

Extent: 0 to 15 percent of the mapped areas

Wozny soils

Extent: 0 to 15 percent of the mapped areas

857B—Frogcreek silt loam, 2 to 6 percent slopes, very stony

Component Description

Frogcreek and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Footslopes and summits

Slope range: 2 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 13 inches; silt loam

2B/E-13 to 19 inches; loam

2Bt1—19 to 32 inches; sandy loam

2Bt2—32 to 46 inches; gravelly sandy loam 3Cd—46 to 80 inches; gravelly loamy sand

Minor Dissimilar Components

Stinnett soils

Extent: 0 to 15 percent of the mapped areas

Stanberry soils

Extent: 0 to 5 percent of the mapped areas

Wozny soils

Extent: 0 to 5 percent of the mapped areas

857C—Frogcreek silt loam, 6 to 15 percent slopes, very stony

Component Description

Frogcreek and similar soils

Extent: 80 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

Minor Dissimilar Components

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 13 inches; silt loam 2B/E—13 to 19 inches; loam 2Bt1—19 to 32 inches; sandy loam

2Bt2—32 to 46 inches; gravelly sandy loam 3Cd—46 to 80 inches; gravelly loamy sand

ics, gravery learny same

Stinnett soils

Extent: 0 to 10 percent of the mapped areas

Stanberry soils

Extent: 0 to 7 percent of the mapped areas

Wozny soils

Extent: 0 to 3 percent of the mapped areas

873B—Stanberry sandy loam, 1 to 6 percent slopes, very stony

Component Description

Stanberry and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam

2BC-32 to 42 inches; loamy sand

2Cd—42 to 80 inches; loamy sand

Minor Dissimilar Components

Springstead soils

Extent: 0 to 15 percent of the mapped areas

Frogcreek soils

Extent: 0 to 5 percent of the mapped areas

Parkfalls soils

Extent: 0 to 5 percent of the mapped areas

Stinnett soils

Extent: 0 to 5 percent of the mapped areas

Wozny soils

Extent: 0 to 5 percent of the mapped areas

873C—Stanberry sandy loam, 6 to 15 percent slopes, very stony

Component Description

Stanberry and similar soils

Extent: 65 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand

2Cd-42 to 80 inches; loamy sand

Minor Dissimilar Components

Keweenaw soils

Extent: 0 to 15 percent of the mapped areas

Springstead soils

Extent: 0 to 10 percent of the mapped areas

Beaverbay soils

Extent: 0 to 5 percent of the mapped areas

Frogcreek soils

Extent: 0 to 5 percent of the mapped areas

Parkfalls soils

Extent: 0 to 5 percent of the mapped areas

Stinnett soils

Extent: 0 to 5 percent of the mapped areas

Wozny soils

Extent: 0 to 5 percent of the mapped areas

873D—Stanberry sandy loam, 15 to 30 percent slopes, very stony

Component Description

Stanberry and similar soils

Extent: 65 to 95 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam

B/E—24 to 32 inches; sandy loam

2BC—32 to 42 inches; loamy sand

2Cd—42 to 80 inches; loamy sand

Minor Dissimilar Components

Keweenaw soils

Extent: 0 to 15 percent of the mapped areas

Padus soils

Extent: 0 to 15 percent of the mapped areas

Beaverbay soils

Extent: 0 to 10 percent of the mapped areas

Frogcreek soils

Extent: 0 to 10 percent of the mapped areas

905A—Cublake loamy sand, 0 to 3 percent slopes

Component Description

Cublake and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash underlain by stratified silty, loamy, and sandy

lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, August,

September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 5.7 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 3 inches; loamy sand E—3 to 4 inches; loamy sand Bs—4 to 23 inches; loamy sand BC—23 to 32 inches; sand C1—32 to 40 inches; sand

C2—40 to 48 inches; fine sand

2C3—48 to 60 inches; stratified very fine sandy loam to silt loam

Minor Dissimilar Components

Flink soils

Extent: 0 to 10 percent of the mapped areas

Annalake soils

Extent: 0 to 10 percent of the mapped areas

Croswell soils

Extent: 0 to 10 percent of the mapped areas

Chinwhisker soils

Extent: 0 to 5 percent of the mapped areas

926A—Flink loamy sand, 0 to 3 percent slopes

Component Description

Flink and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parent material: Sandy outwash deposits underlain by stratified silty, loamy, and sandy

lacustrine deposits

Flooding: None

Shallowest depth to wet zone: 1.0 foot (April) Deepest depth to wet zone: 4.0 feet (August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A-0 to 3 inches; loamy sand

E—3 to 6 inches; sand Bhs—6 to 9 inches; sand Bs—9 to 26 inches; sand

BC—26 to 35 inches; sand C—35 to 46 inches; sand

2Cg-46 to 52 inches; stratified silt to silty clay loam

2C-52 to 80 inches; stratified silt to silty clay loam to loamy very fine sand

Minor Dissimilar Components

Cublake soils

Extent: 0 to 15 percent of the mapped areas

Au Gres soils

Extent: 0 to 10 percent of the mapped areas

Kinross soils

Extent: 0 to 10 percent of the mapped areas

943D—Stanberry, very stony-Greenwood complex, 0 to 35 percent slopes

Component Description

Stanberry and similar soils

Extent: 30 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 30 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Pondina: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand 2Cd—42 to 80 inches; loamy sand

Greenwood and similar soils

Extent: 15 to 30 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe-6 to 60 inches; mucky peat

Minor Dissimilar Components

Frogcreek soils

Extent: 0 to 10 percent of the mapped areas

Sarona soils

Extent: 0 to 10 percent of the mapped areas

Wozny soils

Extent: 0 to 10 percent of the mapped areas

948A—Billyboy silt loam, 0 to 3 percent slopes

Component Description

Billyboy and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loess or silty alluvium underlain by sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 1.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.1 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 11 inches; silt loam
E/B—11 to 20 inches; silt loam
2B/E—20 to 26 inches; loam
2Bt—26 to 30 inches; sandy loam
3Bt—30 to 35 inches; loamy sand

3C-35 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Ossmer soils

Extent: 0 to 10 percent of the mapped areas

Antigo soils

Extent: 0 to 5 percent of the mapped areas

Sconsin soils

Extent: 0 to 5 percent of the mapped areas

970C—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes

Component Description

Keweenaw and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand

E/B—27 to 43 inches; sand B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

Pence and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Greenwood and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi—0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

Minor Dissimilar Components

Haugen soils

Extent: 0 to 15 percent of the mapped areas

Aftad soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 15 percent of the mapped areas

970E—Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 45 percent slopes

Component Description

Keweenaw and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained Parent material: Sandy till

Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.8 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; sandy loam E—2 to 4 inches; sandy loam

Bs1,Bs2—4 to 16 inches; sandy loam Bs3—16 to 20 inches; loamy sand E´—20 to 27 inches; loamy sand

E/B—27 to 43 inches; sand

B/E—43 to 75 inches; loamy sand C—75 to 80 inches; loamy sand

Pence and similar soils

Extent: 15 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 15 to 45 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Mostly loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.0 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 3 inches; sandy loam E—3 to 8 inches; sandy loam

Bs—8 to 15 inches; gravelly sandy loam 2BC—15 to 21 inches; gravelly coarse sand

2C-21 to 60 inches; stratified sand to very gravelly coarse sand

Greenwood and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Organic deposits more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 30.5 inches Content of organic matter in the upper 10 inches: 65.0 percent

Typical profile:

Oi-0 to 6 inches; peat

Oe—6 to 60 inches; mucky peat

Minor Dissimilar Components

Amery soils

Extent: 0 to 20 percent of the mapped areas

Aftad soils

Extent: 0 to 10 percent of the mapped areas

1070C—Fremstadt, stony-Cress complex, 6 to 15 percent slopes

Component Description

Fremstadt and similar soils

Extent: 30 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 6 to 15 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Sandy till or sandy mudflow sediments

Flooding: None

Depth to wet zone: More than 6.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 5 inches; sandy loam Bw—5 to 33 inches; loamy sand B/E1—33 to 37 inches; sandy loam B/E2—37 to 45 inches; loamy sand BC—45 to 70 inches; loamy sand C—70 to 80 inches; loamy sand

Cress and similar soils

Extent: 15 to 40 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam
Bw1—3 to 15 inches; sandy loam
2Bw2—15 to 31 inches; loamy sand
2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Fremstadt soils that are not stony

Extent: 0 to 30 percent of the mapped areas

Haugen soils

Extent: 0 to 15 percent of the mapped areas

Spoonerhill soils that are stony

Extent: 0 to 15 percent of the mapped areas

Mahtomedi soils

Extent: 0 to 10 percent of the mapped areas

Spoonerhill soils

Extent: 0 to 10 percent of the mapped areas

1070D—Fremstadt, stony-Cress complex, 15 to 30 percent slopes

Component Description

Fremstadt and similar soils

Extent: 40 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 15 to 30 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Well drained

Parent material: Sandy till or sandy mudflow sediments

Flooding: None

Depth to wet zone: More than 6.0 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

A—0 to 5 inches; sandy loam Bw—5 to 33 inches; loamy sand B/E1—33 to 37 inches; sandy loam B/E2—37 to 45 inches; loamy sand BC—45 to 70 inches; loamy sand C—70 to 80 inches; loamy sand

Cress and similar soils

Extent: 20 to 50 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 12 to 30 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Mahtomedi soils

Extent: 0 to 15 percent of the mapped areas

Amery soils

Extent: 0 to 10 percent of the mapped areas

Rosholt soils

Extent: 0 to 10 percent of the mapped areas

1080B—Spoonerhill-Spoonerhill, stony-Cress complex, 1 to 6 percent slopes

Component Description

Spoonerhill and similar soils

Extent: 5 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till or sandy mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam

2Bw2-12 to 16 inches; gravelly loamy sand

2E/B-16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2—46 to 80 inches; gravelly loamy sand

Spoonerhill, stony, and similar soils

Extent: 5 to 80 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Summits Slope range: 2 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Thin mantle of loamy alluvium and sandy alluvium underlain by sandy

till or sandy mudflow sediments

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A—0 to 3 inches; sandy loam

Bw1—3 to 12 inches; gravelly sandy loam 2Bw2—12 to 16 inches; gravelly loamy sand

2E/B-16 to 34 inches; loamy sand

2C1—34 to 46 inches; sand

2C2-46 to 80 inches; gravelly loamy sand

Cress and similar soils

Extent: 15 to 35 percent of the mapped areas

Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Summits Slope range: 1 to 6 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat excessively drained

Parent material: Thin layer of loamy alluvium underlain by stratified sandy and gravelly

outwash Flooding: None

Depth to wet zone: More than 6.7 feet all year

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.9 percent

Typical profile:

A—0 to 3 inches; sandy loam Bw1—3 to 15 inches; sandy loam 2Bw2—15 to 31 inches; loamy sand

2Bw3—31 to 36 inches; gravelly loamy sand

2C-36 to 60 inches; stratified sand to very gravelly coarse sand

Minor Dissimilar Components

Fremstadt soils

Extent: 0 to 15 percent of the mapped areas

Grettum soils

Extent: 0 to 10 percent of the mapped areas

1653C—Stanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony

Component Description

Stanberry and similar soils

Extent: 30 to 60 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, March, June, July,

August, September, October, December)

Ponding: None

Available water capacity to a depth of 60 inches: 6.1 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Oa—0 to 1 inch; highly decomposed plant material

E—1 to 3 inches; sandy loam Bs—3 to 19 inches; sandy loam E/B—19 to 24 inches; sandy loam B/E—24 to 32 inches; sandy loam 2BC—32 to 42 inches; loamy sand

2Cd-42 to 80 inches; loamy sand

Parkfalls and similar soils

Extent: 15 to 45 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 30 to 50 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Loamy alluvium underlain by dense sandy till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 5.5 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 8 inches; sandy loam Bs—8 to 17 inches; sandy loam E/B—17 to 30 inches; sandy loam Bt—30 to 33 inches; sandy loam BCd—33 to 48 inches; sandy loam 2Cd—48 to 80 inches; loamy sand

Wozny and similar soils

Extent: 10 to 20 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 2 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Very poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: More than 6.7 feet (August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, December Deepest ponding: 0.5 foot (April, May, November)

Available water capacity to a depth of 60 inches: 10.6 inches Content of organic matter in the upper 10 inches: 21.3 percent

Typical profile:

Oa—0 to 3 inches; muck Eg—3 to 17 inches; silt loam Btg—17 to 37 inches; silt loam

2C-37 to 56 inches; stratified sandy loam to gravelly loam

3Cd-56 to 80 inches; loamy sand

Minor Dissimilar Components

Frogcreek soils

Extent: 0 to 15 percent of the mapped areas

Cathro soils

Extent: 0 to 10 percent of the mapped areas

Keweenaw soils

Extent: 0 to 10 percent of the mapped areas

2015—Pits

Component Description

Pits

Extent: 100 percent of the mapped areas

Geomorphic setting: Stream terraces; outwash plains; moraines; eskers

Flooding: None Ponding: None

This map unit consists of open excavations from which sand, gravel, or loamy material has been removed. Most pits are in areas of outwash, but some are in areas of till. Some pits are still in use. Others are no longer used and have been reclaimed or are covered by brush and weeds. Some pits contain water. Because of the variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

2050—Landfill

Component Description

Landfill

Extent: 100 percent of the mapped areas

This map unit consists of areas of accumulated waste products of human habitation. The areas can be above or below natural ground level. Because of the

variability of this map unit, interpretations for specific uses are not available. Onsite investigation is needed.

3011A—Barronett silt loam, 0 to 2 percent slopes

Component Description

Barronett and similar soils

Extent: 75 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains; drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Mostly silty lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 5.5 feet (February)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 11.5 inches Content of organic matter in the upper 10 inches: 6.1 percent

Typical profile:

Ap—0 to 9 inches; silt loam Eg—9 to 16 inches; silt loam Btg—16 to 34 inches; silt loam

Cg—34 to 60 inches; stratified silt loam to very fine sand

Minor Dissimilar Components

Cathro soils

Extent: 0 to 15 percent of the mapped areas

Comstock soils

Extent: 0 to 10 percent of the mapped areas

3125A—Meehan loamy sand, 0 to 2 percent slopes

Component Description

Meehan and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches Drainage class: Somewhat poorly drained

Parant material: Sandy outwook

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.5 inches Content of organic matter in the upper 10 inches: 1.0 percent

Typical profile:

A-0 to 5 inches; loamy sand

E—5 to 8 inches; sand Bw—8 to 28 inches; sand C—28 to 60 inches; sand

Minor Dissimilar Components

Newson soils

Extent: 0 to 15 percent of the mapped areas

Wurtsmith soils

Extent: 0 to 15 percent of the mapped areas

3126A—Wurtsmith loamy sand, 0 to 3 percent slopes

Component Description

Wurtsmith and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Outwash plains Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 2.0 feet (April)

Deepest depth to wet zone: 5.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 3.8 inches Content of organic matter in the upper 10 inches: 3.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw—9 to 37 inches; coarse sand

C-37 to 60 inches; sand

Minor Dissimilar Components

Friendship soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

Slimlake soils

Extent: 0 to 5 percent of the mapped areas

Meehan soils

Extent: 0 to 5 percent of the mapped areas

3276A—Au Gres loamy sand, 0 to 3 percent slopes

Component Description

Au Gres and similar soils

Extent: 75 to 100 percent of the mapped areas Geomorphic setting: Stream terraces; outwash plains

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Somewhat poorly drained

Parent material: Sandy outwash

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: 4.0 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 0.8 percent Typical profile:

Oa—0 to 2 inches; highly decomposed plant material

E—2 to 5 inches; loamy sand Bhs—5 to 8 inches; loamy sand Bs—8 to 16 inches; loamy sand BC—16 to 28 inches; sand C—28 to 60 inches; sand

Minor Dissimilar Components

Croswell soils

Extent: 0 to 10 percent of the mapped areas

Kinross soils

Extent: 0 to 10 percent of the mapped areas

Flink soils

Extent: 0 to 5 percent of the mapped areas

Chinwhisker soils

Extent: 0 to 5 percent of the mapped areas

3312B—Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes

Component Description

Glendenning, very stony, and similar soils

Extent: 20 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 1.1 percent

Typical profile:

A—0 to 5 inches; sandy loam E—5 to 15 inches; sandy loam E/B—15 to 20 inches; sandy loam B/E—20 to 26 inches; sandy loam Bt1—26 to 40 inches; sandy loam Bt2—40 to 65 inches; sandy loam Cd—65 to 80 inches; sandy loam

Glendenning and similar soils

Extent: 15 to 75 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 60 to 80 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Sandy loam till or mudflow sediments

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.8 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

Ap—0 to 7 inches; sandy loam E—7 to 15 inches; sandy loam E/B—15 to 20 inches; sandy loam B/E—20 to 26 inches; sandy loam Bt1—26 to 40 inches; sandy loam Bt2—40 to 65 inches; sandy loam Cd—65 to 80 inches; sandy loam

Minor Dissimilar Components

Capitola soils

Extent: 0 to 15 percent of the mapped areas

Haugen soils

Extent: 0 to 10 percent of the mapped areas

Oesterle soils

Extent: 0 to 5 percent of the mapped areas

Plover soils

Extent: 0 to 5 percent of the mapped areas

3336A—Fenander fine sandy loam, 0 to 2 percent slopes

Component Description

Fenander and similar soils

Extent: 80 to 100 percent of the mapped areas

Geomorphic setting: Depressions on lake plains; drainageways on stream terraces

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Poorly drained

Parent material: Stratified loamy and sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (March, April, May, June, October, November)

Deepest depth to wet zone: 5.5 feet (February)

Months in which ponding does not occur: January, February, March, June, July, August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 8.4 inches Content of organic matter in the upper 10 inches: 2.4 percent

Typical profile:

Ap—0 to 9 inches; fine sandy loam Eg—9 to 15 inches; fine sandy loam

Btg-15 to 27 inches; loam

BC-27 to 33 inches; fine sandy loam

C-33 to 80 inches; stratified loamy fine sand to fine sandy loam

Minor Dissimilar Components

Plover soils

Extent: 0 to 10 percent of the mapped areas

Cathro soils

Extent: 0 to 5 percent of the mapped areas

3403A—Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes

Component Description

Loxley and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material more than 51 inches thick

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 26.5 inches Content of organic matter in the upper 10 inches: 80.0 percent

Typical profile:

Oe—0 to 13 inches; mucky peat Oa—13 to 60 inches; muck

Beseman and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Herbaceous organic material 16 to 51 inches thick over loamy till

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November)

Deepest depth to wet zone: 1.0 foot (January, February)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches

Content of organic matter in the upper 10 inches: 50.0 percent

Typical profile:

Oa—0 to 36 inches; muck Cg—36 to 60 inches; loam

Dawson and similar soils

Extent: 0 to 100 percent of the mapped areas

Geomorphic setting: Depressions on disintegration moraines

Slope range: 0 to 1 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sphagnum moss and herbaceous organic material 16 to 51 inches thick over sandy or sandy and gravelly deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, June, October, November) Deepest depth to wet zone: 0.5 foot (January, February, March, July, August,

September, December)

Months in which ponding does not occur: January, February, March, May, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April)

Available water capacity to a depth of 60 inches: 18.2 inches Content of organic matter in the upper 10 inches: 75.0 percent

Typical profile:

Oi—0 to 8 inches; peat Oa—8 to 38 inches; muck A—38 to 40 inches; silt loam 2C—40 to 60 inches; sand

Minor Dissimilar Components

Uskabwanka soils

Extent: 0 to 5 percent of the mapped areas

3424C—Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony, rocky

Component Description

Frogcreek and similar soils

Extent: 15 to 70 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Shoulders and backslopes

Slope range: 2 to 15 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Moderately well drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 1.0 foot (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September)
Ponding: None

Available water capacity to a depth of 60 inches: 7.4 inches Content of organic matter in the upper 10 inches: 2.1 percent

Typical profile:

A—0 to 4 inches; silt loam
E—4 to 13 inches; silt loam
2B/E—13 to 19 inches; loam
2Bt1—19 to 32 inches; sandy loam
2Bt2—32 to 46 inches; gravelly sandy loam
3Cd—46 to 80 inches; gravelly loamy sand

Magroc and similar soils

Extent: 15 to 35 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to lithic bedrock

Drainage class: Somewhat poorly drained

Parent material: Loess underlain by loamy glacial till

Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 7.3 inches Content of organic matter in the upper 10 inches: 0.6 percent

Typical profile:

A—0 to 2 inches; silt loam
E—2 to 11 inches; silt loam
E/B—11 to 22 inches; silt loam
2Bt—22 to 30 inches; sandy loam
3C1—30 to 45 inches; gravelly loamy sand
3C2—45 to 50 inches; gravelly loamy sand
4R—50 to 80 inches; unweathered bedrock

Stinnett and similar soils

Extent: 15 to 30 percent of the mapped areas Geomorphic setting: Disintegration moraines

Position on the landform: Footslopes

Slope range: 0 to 4 percent

Depth to restrictive layer(s): 40 to 60 inches to dense material

Drainage class: Somewhat poorly drained

Parent material: Mantle of loess or silty alluvium and loamy alluvium underlain by

dense sandy till Flooding: None

Shallowest depth to wet zone: 0.5 foot (April)

Deepest depth to wet zone: More than 6.7 feet (July, August)

Ponding: None

Available water capacity to a depth of 60 inches: 9.6 inches Content of organic matter in the upper 10 inches: 1.4 percent

Typical profile:

A—0 to 4 inches; silt loam E—4 to 7 inches; silt E/B—7 to 18 inches; silt B/E—18 to 29 inches; silt loam 2Bt1—29 to 34 inches; loam 2Bt2—34 to 41 inches; sandy loam 3C—41 to 55 inches; loamy sand 3Cd—55 to 80 inches; loamy sand

Rock outcrop

Extent: 1 to 10 percent of the mapped areas Geomorphic setting: Disintegration moraines Position on the landform: Summits and shoulders

Slope range: 0 to 10 percent

Minor Dissimilar Components

Stanberry soils

Extent: 0 to 5 percent of the mapped areas

Wozny soils

Extent: 0 to 5 percent of the mapped areas

3446A—Newson muck, 0 to 2 percent slopes

Component Description

Newson and similar soils

Extent: 65 to 100 percent of the mapped areas

Geomorphic setting: Drainageways and depressions on outwash plains and lake

plains

Slope range: 0 to 2 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Very poorly drained

Parent material: Sandy outwash or sandy lacustrine deposits

Flooding: None

Shallowest depth to wet zone: At the surface (April, May, November)

Deepest depth to wet zone: 2.5 feet (February, August)

Months in which ponding does not occur: January, February, March, June, July,

August, September, October, November, December

Deepest ponding: 0.5 foot (April, May)

Available water capacity to a depth of 60 inches: 5.6 inches Content of organic matter in the upper 10 inches: 25.0 percent

Typical profile:

Oa—0 to 3 inches; muck A—3 to 8 inches; loamy sand Bg—8 to 16 inches; sand BCg—16 to 22 inches; sand C—22 to 60 inches; sand

Minor Dissimilar Components

Meehan soils

Extent: 0 to 15 percent of the mapped areas

Markey soils

Extent: 0 to 10 percent of the mapped areas

Minocqua soils

Extent: 0 to 5 percent of the mapped areas

3448B—Grettum loamy sand, 0 to 6 percent slopes

Component Description

Grettum and similar soils

Extent: 60 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains

Position on the landform: Summits Slope range: 0 to 6 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or sandy lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches; sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 7 percent of the mapped areas

Aftad soils

Extent: 0 to 5 percent of the mapped areas

Karlsborg soils

Extent: 0 to 3 percent of the mapped areas

3448C—Grettum loamy sand, 6 to 12 percent slopes

Component Description

Grettum and similar soils

Extent: 65 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; lake plains Position on the landform: Shoulders and backslopes

Slope range: 6 to 12 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Sandy outwash or sandy lacustrine deposits with lamellae

Flooding: None

Shallowest depth to wet zone: 4.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, June, July, August, September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 0.8 percent

Typical profile:

A—0 to 3 inches; loamy sand Bw—3 to 32 inches; sand E&Bt—32 to 75 inches; sand C—75 to 80 inches: sand

Minor Dissimilar Components

Graycalm soils

Extent: 0 to 15 percent of the mapped areas

Menahga soils

Extent: 0 to 10 percent of the mapped areas

Cress soils

Extent: 0 to 6 percent of the mapped areas

Aftad soils

Extent: 0 to 2 percent of the mapped areas

Karlsborg soils

Extent: 0 to 2 percent of the mapped areas

3516A—Slimlake sandy loam, 0 to 3 percent slopes

Component Description

Slimlake and similar soils

Extent: 55 to 100 percent of the mapped areas Geomorphic setting: Outwash plains; stream terraces

Position on the landform: Footslopes

Slope range: 0 to 3 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Loamy alluvium over stratified sandy and gravelly outwash

Flooding: None

Shallowest depth to wet zone: 2.5 feet (April)

Deepest depth to wet zone: 5.5 feet (February, August)

Ponding: None

Available water capacity to a depth of 60 inches: 4.3 inches Content of organic matter in the upper 10 inches: 1.3 percent

Typical profile:

A—0 to 6 inches; sandy loam Bw—6 to 17 inches; sandy loam 2BC—17 to 42 inches; gravelly sand 2C1—42 to 53 inches; gravelly sand 2C2—53 to 80 inches; sand

Minor Dissimilar Components

Cress soils

Extent: 0 to 15 percent of the mapped areas

Oesterle soils

Extent: 0 to 15 percent of the mapped areas

Scott Lake soils

Extent: 0 to 10 percent of the mapped areas

Spoonerhill soils

Extent: 0 to 5 percent of the mapped areas

Friendship soils

Extent: 0 to 3 percent of the mapped areas

3629B—Perida loamy sand, 0 to 4 percent slopes

Component Description

Perida and similar soils

Extent: 70 to 100 percent of the mapped areas

Geomorphic setting: Lake plains Position on the landform: Summits Slope range: 0 to 4 percent

Depth to restrictive layer(s): More than 80 inches

Drainage class: Moderately well drained

Parent material: Mantle of sandy outwash or sandy lacustrine deposits over clayey lacustrine deposits underlain by sandy outwash or sandy lacustrine

deposits Flooding: None

Shallowest depth to wet zone: 3.5 feet (April)

Deepest depth to wet zone: More than 6.7 feet (January, February, July, August,

September, October, November, December)

Ponding: None

Available water capacity to a depth of 60 inches: 4.8 inches Content of organic matter in the upper 10 inches: 1.2 percent

Typical profile:

Ap—0 to 9 inches; loamy sand Bw1,Bw2,Bw3—9 to 43 inches; sand Bw4—43 to 45 inches; loamy sand 2Bt1—45 to 60 inches; clay 2Bt2—60 to 74 inches; silty clay 3C—74 to 80 inches; sand

Minor Dissimilar Components

Grettum soils

Extent: 0 to 10 percent of the mapped areas

Stengel soils

Extent: 0 to 10 percent of the mapped areas

Karlsborg soils

Extent: 0 to 5 percent of the mapped areas

Meenon soils

Extent: 0 to 5 percent of the mapped areas

M-W-Miscellaneous water

• This map unit consists of manmade areas that are used for industrial, sanitary, or mining applications and that contain water most of the year. Included in mapping are narrow dikes that surround the water areas.

W—Water

• This map unit consists of naturally occurring bodies of water, such as rivers, streams, lakes, reservoirs, and ponds.

Table 2.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
			i i
3A	Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes frequently		İ
	flooded	3,249	0.6
22A	Comstock silt loam, 0 to 3 percent slopes	611	0.1
24A	Poskin silt loam, 0 to 3 percent slopes	278	*
27A	Scott Lake sandy loam, 0 to 3 percent slopes	1,317	0.2
28B	Haugen-Rosholt complex, 2 to 6 percent slopes, very stony	2,530	0.5
28C	Haugen-Rosholt complex, 6 to 12 percent slopes, very stony	15,077	2.8
33B	Chetek sandy loam, 1 to 6 percent slopes	532	*
33C	Chetek sandy loam, 6 to 12 percent slopes	703	0.1
38A	Rosholt sandy loam, 0 to 2 percent slopes	1,180	0.2
38B	Rosholt sandy loam, 2 to 6 percent slopes	3,805	0.7
38C	Rosholt sandy loam, 6 to 12 percent slopes	6,704	1.2
38D	Rosholt sandy loam, 12 to 20 percent slopes	3,498	0.6
42D	Amery sandy loam, 12 to 25 percent slopes, very stony	4,737	0.9
43B	Antigo silt loam, 1 to 6 percent slopes	3,476	0.6
43C	Antigo silt loam, 6 to 15 percent slopes	1,847	0.3
43D	Antigo silt loam, 15 to 30 percent slopes	1,569	0.3
18A	Brill silt loam, 0 to 3 percent slopes	514	*
3A	Crystal Lake silt loam, 0 to 2 percent slopes	631	0.1
53B	Crystal Lake silt loam, 2 to 6 percent slopes	2,064	0.4
53C	Crystal Lake silt loam, 6 to 12 percent slopes	362	*
63E	Crystal Lake silt loam, 20 to 35 percent slopes	11	*
64A	Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded	1,010	0.2
59B	Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	1,635	0.3
59C	Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony	11,315	2.1
69E	Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony	15,136	2.8
74B	Vilas loamy sand, 0 to 6 percent slopes	429	*
74C	Vilas loamy sand, 6 to 15 percent slopes	329	*
74D	Vilas loamy sand, 15 to 30 percent slopes	45	*
100B	Menahga sand, 0 to 6 percent slopes	9,939	1.8
100B	Menahga sand, 6 to 12 percent slopes	13,033	2.4
100C	Menahga sand, 12 to 30 percent slopes	9,091	1.7
127D	Amery-Rosholt complex, 12 to 20 percent slopes, very stony	8,173	1.5
127E		4,014	0.7
156B	Amery-Rosholt complex, 20 to 45 percent slopes, very stony	3,242	
	Magnor, very stony-Magnor complex, 0 to 4 percent slopes	-	0.6
L57B L57C	Freeon, very stony-Freeon complex, 2 to 6 percent slopes	7,601	1.4
	Freeon, very stony-Freeon complex, 6 to 12 percent slopes	6,346	1.2
.60A	Oesterle sandy loam, 0 to 2 percent slopes	1,668	0.3
L82B	Padus sandy loam, 0 to 6 percent slopes	89	*
L82C	Padus sandy loam, 6 to 15 percent slopes	63	*
L92A	Worcester sandy loam, 0 to 3 percent slopes	379	*
L93A	Minocqua muck, 0 to 2 percent slopes	816	0.1
215B	Pence sandy loam, 0 to 6 percent slopes	140	*
215C	Pence sandy loam, 6 to 15 percent slopes	105	*

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
215D		150	*
315A	Rib silt loam, 0 to 2 percent slopes	85	*
337A	Plover fine sandy loam, 0 to 3 percent slopes	870	0.2
368B	Mahtomedi-Cress complex, 2 to 6 percent slopes	624	0.1
368C	Mahtomedi-Cress complex, 6 to 12 percent slopes	978	0.2
368D	Mahtomedi-Cress complex, 12 to 25 percent slopes	494	*
371A	Croswell loamy sand, 0 to 3 percent slopes	464	*
380B	Cress-Rosholt complex, 2 to 6 percent slopes	683	0.1
380C	Cress-Rosholt complex, 6 to 12 percent slopes	1,413	0.3
380D	Cress-Rosholt complex, 12 to 25 percent slopes	1,751	0.3
383B	Mahtomedi loamy sand, 0 to 6 percent slopes	3,817	0.7
383C 383D	Mahtomedi loamy sand, 6 to 12 percent slopes Mahtomedi loamy sand, 12 to 30 percent slopes	6,306 5,488	1.2
396B	Friendship-Wurtsmith-Grayling complex, 0 to 6 percent slopes	216	*
397A	Perchlake loamy fine sand, 0 to 2 percent slopes	508	*
399B	Grayling sand, 0 to 6 percent slopes	11,132	2.0
399C	Grayling sand, 6 to 12 percent slopes	7,656	1.4
399D	Grayling sand, 12 to 30 percent slopes	8,334	1.5
405A	Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	15,054	2.8
406A	Loxley mucky peat, 0 to 1 percent slopes	10,820	2.0
407A	Seelyeville and Markey soils, 0 to 1 percent slopes	20,194	3.7
410A	Seelyeville and Cathro soils, 0 to 1 percent slopes	5,660	1.0
412A	Rifle and Tacoosh soils, 0 to 1 percent slopes	219	*
415A	Greenwood mucky peat, 0 to 1 percent slopes Graycalm-Menahga complex, 0 to 6 percent slopes	86	*
439B 439C	Graycalm-Menanga complex, 6 to 12 percent slopes	19,802 22,879	3.6
439D	Graycalm-Menanga complex, 0 to 12 percent slopes	12,229	2.2
441C	Freeon, very stony-Cathro complex, 0 to 15 percent slopes	2,315	0.4
442C	Haugen, very stony-Greenwood complex, 0 to 15 percent slopes	10,598	1.9
443D	Amery, very stony-Greenwood complex, 0 to 35 percent slopes	6,929	1.3
461A	Bowstring muck, 0 to 1 percent slopes, frequently flooded	2,482	0.5
484A	Greenwood and Beseman soils, 0 to 1 percent slopes	2,023	0.4
495B	Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes	367	*
495C	Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes	333	*
495D	Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes	264	*
497A	Meenon loamy sand, 0 to 3 percent slopes	373	*
515A 521A	Manitowish sandy loam, 0 to 3 percent slopes Dody muck, 0 to 2 percent slopes	298	*
521A 524E	Rock outcrop-Frogcreek-Metonga complex, 2 to 45 percent slopes, very	34	,
	stony	680	0.1
542B	Haugen, very stony-Haugen complex, 2 to 6 percent slopes	3,201	0.6
542C	Haugen, very stony-Haugen complex, 6 to 12 percent slopes	8,958	1.6
543B	Anigon silt loam, 2 to 6 percent slopes	3,221	0.6
543C2	Anigon silt loam, 6 to 12 percent slopes, eroded	2,512	0.5
544F	Menahga and Mahtomedi soils, 30 to 45 percent slopes	6,423	1.2
555A	Fordum silt loam, 0 to 2 percent slopes, frequently flooded	698	0.1
574B	Sayner loamy sand, 0 to 6 percent slopes	440	*
574C 574E	Sayner loamy sand, 6 to 15 percent slopes Sayner loamy sand, 15 to 45 percent slopes	701 689	0.1
579B	Parkfalls sandy loam, 0 to 4 percent slopes, very stony	605	0.1
600A	Haplosaprists and Psammaquents, 0 to 2 percent slopes	622	0.1
615B	Cress sandy loam, 0 to 6 percent slopes	8,042	1.5
615C	Cress sandy loam, 6 to 12 percent slopes	4,568	0.8
615D	Cress sandy loam, 12 to 30 percent slopes	3,300	0.6
623A	Capitola muck, 0 to 2 percent slopes, very stony	666	0.1
624A	Ossmer silt loam, 0 to 3 percent slopes	719	0.1
632A	Aftad fine sandy loam, 0 to 2 percent slopes	569	0.1
632B	Aftad fine sandy loam, 2 to 6 percent slopes	1,989	0.4
632C	Aftad fine sandy loam, 6 to 12 percent slopes	564	0.1
633F	Pence and Padus soils, 30 to 45 percent slopes	35	*
648B 670C	Sconsin silt loam, 1 to 6 percent slopes Keweenaw-Pence complex, 6 to 15 percent slopes, stony	1,251	0.2
670E	Keweenaw-Pence complex, 6 to 15 percent slopes, stony	11,260 16,257	3.0
0 / OE	Achievement Tonce complex, 13 to 13 percent Stopes, Stony	10,237	3.0

See footnote at end of table.

Table 2.--Acreage and Proportionate Extent of the Soils--Continued

Map symbol	Soil name	Acres	Percent
671B	Spoonerhill, stony-Spoonerhill complex, 2 to 6 percent slopes	8,718	1.6
680B	Stanberry-Pence complex, 2 to 6 percent slopes, stony	2,258	0.4
683A	Tipler sandy loam, 0 to 3 percent slopes	228	*
706A	Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded	72	*
724A	Rib-Rock outcrop complex, 0 to 2 percent slopes	625	0.1
726B	Sissabagama loamy sand, 0 to 6 percent slopes	536	*
733A	Wozny muck, 0 to 2 percent slopes, very stony	949	0.2
771A	Lenroot loamy sand, 0 to 3 percent slopes	267	*
827A	Scoba sandy loam, 0 to 3 percent slopes	2,024	0.4
853C	Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony	8,125	1.5
856B	Stinnett silt loam, 0 to 4 percent slopes, very stony	1,846	0.3
857B	Frogcreek silt loam, 2 to 6 percent slopes, very stony	3,531	0.6
857C	Frogcreek silt loam, 6 to 15 percent slopes, very stony	5,915	1.1
873B	Stanberry sandy loam, 1 to 6 percent slopes, very stony	1,269	0.2
873C	Stanberry sandy loam, 6 to 15 percent slopes, very stony	1,985	0.4
873D	Stanberry sandy loam, 15 to 30 percent slopes, very stony	4,980	0.9
905A	Cublake loamy sand, 0 to 3 percent slopes	213	*
926A	Flink loamy sand, 0 to 3 percent slopes	155	*
943D	Stanberry, very stony-Greenwood complex, 0 to 35 percent slopes	338	*
948A	Billyboy silt loam, 0 to 3 percent slopes	355	*
970C	Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes	1,513	0.3
970E	Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 45 percent slopes	5,043	0.9
1070C	Fremstadt, stony-Cress complex, 6 to 15 percent slopes	10,377	1.9
1070D	Fremstadt, stony-Cress complex, 15 to 30 percent slopes	3,778	0.7
1080B	Spoonerhill-Spoonerhill, stony-Cress complex, 1 to 6 percent slopes	3,600	0.7
1653C	Stanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony	1,788	0.3
2015	Pits	361	*
2050	Landfill	114	*
3011A	Barronett silt loam, 0 to 2 percent slopes	128	*
3125A	Meehan loamy sand, 0 to 2 percent slopes	1,597	0.3
3126A	Wurtsmith loamy sand, 0 to 3 percent slopes	3,630	0.7
3276A	Au Gres loamy sand, 0 to 3 percent slopes	253	*
3312B	Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes	1,871	0.3
3336A	Fenander fine sandy loam, 0 to 2 percent slopes	263	*
3403A	Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes	6,326	1.2
3424C	Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony,		i
	rocky	3,934	0.7
3446A	Newson muck, 0 to 2 percent slopes	731	0.1
3448B	Grettum loamy sand, 0 to 6 percent slopes	10,350	1.9
3448C	Grettum loamy sand, 6 to 12 percent slopes	609	0.1
3516A	Slimlake sandy loam, 0 to 3 percent slopes	1,433	0.3
3629B	Perida loamy sand, 0 to 4 percent slopes	155	*
M-W	Miscellaneous water	156	*
M – M	Water	33,322	6.1
		546,912	100.0

^{*} Less than 0.1 percent.

Use and Management of the Soils

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as forest land; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; as sites for agricultural waste management; and as wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Planners and others using soil survey information can evaluate the effect of specific land uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited*, *somewhat limited*, and *very limited*. The suitability ratings are expressed as *well suited*, *moderately suited*, *poorly suited*, and *unsuited* or as *good*, *fair*, *poor*, and *very poor*.

Numerical Ratings

Numerical ratings in the tables indicate the relative severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate

gradations between the point at which a soil feature has the greatest negative impact on the use and the point at which the soil feature is not a limitation. The limitations appear in order from the most limiting to the least limiting. Thus, if more than one limitation is identified, the most severe limitation is listed first and the least severe one is listed last.

Crops and Pasture

General management needed for crops and for hay and pasture is suggested in this section. Climate information for the survey area is provided, the estimated yields of the main crops and hay and pasture plants are listed, the system of land capability classification used by the Natural Resources Conservation Service is explained, and prime farmland is described. Planners of management systems for individual fields or farms should consider obtaining specific information from the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

Climate

Table 3 gives data on temperature and precipitation for the survey area as recorded at the Spooner Experiment Farm during the period from 1971 to 2000. Table 4 shows probable dates of the first freeze in fall and the last freeze in spring. Table 5 provides data on length of the growing season.

In winter, the average temperature is 14.9 degrees F and the average daily minimum temperature is 4.5 degrees. The lowest temperature on record, which occurred on February 16, 1936, is -46 degrees. In summer, the average temperature is 67.1 degrees and the average daily maximum temperature is 79.3 degrees. The highest temperature, which occurred on July 11, 1936, is 110 degrees.

Growing degree days are shown in table 3. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 30 inches. Of this total, 19.56 inches, or 65 percent, usually falls in May through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall on record was 4.41 inches on May 9, 1918. Thunderstorms occur on about 35 days each year, and most occur between June and August.

The average seasonal snowfall is 51.8 inches. The greatest snow depth at any one time during the period of record was 40 inches on February 5, 1971. On an average, 107 days per year have at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 18 inches on March 25, 1996.

The average relative humidity in midafternoon is about 50 percent in April and May and 70 percent in December. Humidity is higher at night, and the average at dawn is about 90 percent in the summer and 80 percent in the winter. The sun shines approximately 62 percent of the time possible in summer and about 50 percent in winter. The prevailing wind is from the south in most months, but it is from the northwest from December through April. Average windspeed is highest, around 11 miles per hour, in April.

Cropland Management Considerations

The management concerns affecting the use of the soil map units in the survey area for crops are shown in table 6. The main concerns in managing nonirrigated

cropland are conserving moisture, controlling wind erosion and water erosion, and maintaining soil fertility.

Conserving moisture consists primarily of reducing the evaporation and runoff rates and increasing the water infiltration rate. Applying conservation tillage and conservation cropping systems, farming on the contour, stripcropping, establishing field windbreaks, and leaving crop residue on the surface conserve moisture.

Generally, a combination of several practices is needed to control *wind erosion* and *water erosion*. Conservation tillage, stripcropping, field windbreaks, contour farming, conservation cropping systems, crop residue management, terraces, diversions, and grassed waterways help to prevent excessive soil loss.

Measures that are effective in maintaining *soil fertility* include applying fertilizer, both organic and inorganic, including manure; incorporating crop residue or green manure crops into the soil; and using proper crop rotations. Controlling erosion helps to prevent the loss of organic matter and plant nutrients and thus helps to maintain productivity, although the level of fertility can be reduced even in areas where erosion is controlled. All soils used for nonirrigated crops respond well to applications of fertilizer.

Some of the considerations shown in the table cannot be easily overcome. These are channels, flooding, gullies, and ponding.

Additional considerations are as follows:

Lime content, limited available water capacity, limited content of organic matter, potential poor tilth and compaction, and restricted permeability.—These limitations can be minimized by incorporating green manure crops, manure, or crop residue into the soil; applying a system of conservation tillage; and using conservation cropping systems. Also, crops may respond well to additions of phosphate fertilizer to soils that have a high content of lime.

Potential for ground-water contamination.—The proper use of nutrients and pesticides can reduce the risk of ground-water contamination.

Potential for surface-water contamination.—The risk of surface-water contamination can be reduced by the proper use of nutrients and pesticides and by conservation farming practices that reduce the runoff rate.

Surface crusting.—This limitation retards seedling development after periods of heavy rainfall.

Surface rock fragments.—This limitation causes rapid wear of tillage equipment. It cannot be easily overcome.

Surface stones.—Stones or boulders on or near the surface can hinder normal tillage unless they are removed.

Salt content.—In areas where this is a limitation, only salt-tolerant crops should be grown.

On irrigated soils the main management concerns are efficient water use, nutrient management, control of erosion, pest and weed control, and timely planting and harvesting for a successful crop. An irrigation system that provides optimum control and distribution of water at minimum cost is needed. Overirrigation wastes water, leaches plant nutrients, and causes erosion. Also, it can increase wetness and soil salinity.

Explanation of Criteria

Acid soil.—The pH is less than 6.1.

Channeled.—The word "channeled" is included in the map unit name.

Dense layer.—The bulk density is 1.80 g/cc or greater within the soil profile.

Depth to rock.—The depth to bedrock is less than 40 inches.

Eroded.—The word "eroded" is included in the map unit name.

Excessive permeability.—Saturated hydraulic conductivity is 42 micrometers per second or more within the soil profile.

Flooding.—Flooding is occasional, frequent, or very frequent.

Gullied.—The word "gullied" is included in the map unit name.

High content of organic matter.—The surface layer has more than 20 percent organic matter.

Lime content.—The pH is 7.4 or more in the surface layer, or the wind erodibility group is 4L.

Limited available water capacity.—The available water capacity calculated to a depth of 60 inches or to a root-limiting layer is 6 inches or less.

Limited content of organic matter.—The content of organic matter is 2 percent or less in the surface layer.

Ponding.—Ponding duration is assigned to the soil. Water is above the surface. Potential poor tilth and compaction.—The content of clay is 27 percent or more in the surface layer.

Potential for ground-water contamination (by nutrients or pesticides).—The depth to a zone in which the soil moisture status is wet is 4 feet or less, the saturated hydraulic conductivity of any layer is more than 42 micrometers per second, or the depth to bedrock is less than 60 inches.

Potential for surface-water contamination (by nutrients or pesticides).—The soil is occasionally, frequently, or very frequently flooded, is subject to ponding, is assigned to hydrologic group C or D and has a slope of more than 2 percent, is assigned to hydrologic group A and has a slope of more than 6 percent, or is assigned to hydrologic group B, has a slope of 3 percent or more, and has a K factor of more than 0.17.

Previously eroded.—The word "eroded" is included in the map unit name.

Restricted permeability.—Saturated hydraulic conductivity is less than 0.42 micrometer per second within the soil profile.

Salt content.—The electrical conductivity is 4 or more in the surface layer or 8 or more within a depth of 30 inches.

Slope (equipment limitation).—The slope is more than 15 percent.

Surface crusting.—The content of clay is 27 percent or more and the content of organic matter is 2 percent or less in the surface layer.

Surface rock fragments (equipment limitation).—The terms describing the texture of the surface layer include any rock fragment modifier, except for gravelly, channery, stony, very stony, extremely stony, bouldery, very bouldery, and extremely bouldery.

Surface stones (equipment limitation).—The word "stony" or "bouldery" is included in the description of the surface layer, or 0.01 percent or more of the surface is covered by boulders.

Water erosion.—Either the slope is 6 percent or more, or the slope is more than 3 percent and less than 6 percent and the surface layer is not sandy.

Wet soil moisture status.—A zone in which the soil moisture status is wet is within 2.5 feet of the surface.

Wind erosion.—The wind erodibility group is 1, 2, 3, or 4L.

Hydrologic groups are described under the heading "Water Features." Erosion factors (e.g., K factor) and wind erodibility groups are described under the heading "Physical Properties."

Crop Yield Estimates

The average yields per acre that can be expected of the principal crops and hay and pasture plants under a high level of management are shown in table 7. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of map units in the survey area also is shown in table 7.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

Pasture and Hayland Interpretations

Under good management, proper grazing is essential for the production of high-quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and pasture renovation also are important management practices.

Yield estimates are often provided in animal unit months (AUM), or the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

The local office of the Natural Resources Conservation Service or the Cooperative Extension Service can provide information about forage yields other than those shown in the yields table.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not take into account major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for forest land or for engineering purposes.

In the capability system, soils generally are grouped at three levels—capability class, subclass, and unit (USDA, 1961). These categories indicate the degree and kinds of limitations affecting mechanized farming systems that produce the more commonly grown field crops, such as corn, small grain, cotton, hay, and field-grown vegetables. Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use.

If properly managed, soils in classes 1, 2, 3, and 4 are suitable for the mechanized production of commonly grown field crops and for pasture and forest land. The degree of the soil limitations affecting the production of cultivated crops increases progressively from class 1 to class 4. The limitations can affect levels of production and the risk of permanent soil deterioration caused by erosion and other factors.

Soils in classes 5, 6, and 7 are generally not suited to the mechanized production of commonly grown field crops without special management, but they are suitable for plants that provide a permanent cover, such as grasses and trees. The severity of the soil limitations affecting crops increases progressively from class 5 to class 7.

Areas in class 8 are generally not suitable for crops, pasture, or forest land without a level of management that is impractical. These areas may have potential for other uses, such as recreational facilities and wildlife habitat.

Capability subclasses identify the dominant kind of limitation in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, 2e. The letter e shows that the main hazard is the risk of erosion unless a close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

There are no subclasses in class 1 because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion. They have other limitations that restrict their use mainly to pasture, forest land, wildlife habitat, or recreation.

The capability classification of map units in the survey area is given in table 7.

Prime Farmland

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, feed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, or forest land or for other purposes. They either are used for food and fiber or are available for these uses. Urban or built-up land, public land, and water areas cannot be considered prime farmland. Urban or built-up land is any contiguous unit of land 10 acres or more in size that is used for such purposes as housing, industrial, and commercial sites, sites for institutions or public buildings, small parks, golf courses, cemeteries, railroad yards, airports, sanitary landfills, sewage treatment plants, and water-control structures. Public land is land not available for farming in national forests, national parks, military reservations, and state parks.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and growing season are favorable, and the level of acidity or alkalinity and the content of salts and sodium are

acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods, and they are not frequently flooded during the growing season or are protected from flooding. Slopes range mainly from 0 to 6 percent.

Soils that have a saturated zone high in the profile or soils that are subject to flooding may qualify as prime farmland where these limitations are overcome by drainage measures or flood control. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

About 55,841 acres, or 10.2 percent of the survey area, meets the requirements for prime farmland.

The map units in the survey area that meet the requirements for prime farmland are listed in table 8. This list does not constitute a recommendation for a particular land use. On some soils included in the table, measures that overcome limitations are needed. The need for these measures is indicated in parentheses after the map unit name. The location of each map unit is shown on the soil maps. The soil qualities that affect use and management are described in the section "Soil Map Unit Descriptions."

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low- and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, and provide food and cover for wildlife.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Windbreaks are often planted on land that did not originally support trees. Knowledge of how trees perform on such land can be gained only by observing and recording the performance of trees that have been planted and have survived. Many popular windbreak species are not indigenous to the areas in which they are planted.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters, a tree or shrub may grow well or grow poorly, depending on the characteristics of the soil. Each tree or shrub has definable potential heights in a given physiographic area and under a given climate. Accurate definitions of potential heights are necessary when a windbreak is planned and designed.

Table 9 shows the height that locally grown trees and shrubs are expected to reach in 20 years on various soils. The estimates in this table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from local offices of the Natural Resources Conservation Service or the Cooperative Extension Service or from a nursery.

Conservation Tree/Shrub Suitability Groups

Conservation tree/shrub suitability groups consist of soils in which the kinds and degrees of the hazards and limitations that affect the survival and growth of trees and shrubs in conservation plantings are about the same. The conservation tree/shrub suitability groups assigned to the soils in the survey area are listed in table 10. Descriptions of the groups are provided in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Forest Land Management

Information about the hazards and limitations that should be considered in areas used as forest land are given in tables 11 through 14.

Forest Land Harvest Equipment Considerations

Table 11 provides information regarding the use of harvest equipment in areas used as forest land.

For most soils spring is the most limiting season. Alternate thawing and freezing during snowmelt cause saturation and low strength of the surface soil layers. When thawing is complete, saturation continues for short periods in well drained soils to nearly all year in very poorly drained soils in depressions. Degrees of wetness are generally proportionate to the depth at which a zone of saturation occurs. This zone generally is lower in summer during the heavy use of moisture by vegetation and is nearer the surface during periods when absorbed precipitation is greater than the vegetation requires. Harvesting during periods of saturation usually results in severe soil damage, except when the soil is frozen. The preferred season for timber harvest on many soils is winter, when wetness and low soil strength can be overcome by freezing.

Considerations shown in table 11 are as follows:

Slope.—The upper slope limit is more than 15 percent.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 10 inches.

Rubbly surface.—The word "rubbly" is in the map unit name.

Surface stones.—The words "extremely stony" are in the map unit name.

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Poor traction (loose sandy material).—The USDA texture includes sands or loamy sands in any layer at a depth of 10 inches or less.

Forest Haul Road Considerations

Table 12 provides information regarding the use of the soils as haul roads. Haul roads serve as transportation routes from log landings to primary roads. Generally, haul roads are unpaved, but some are graveled.

Considerations shown in the table are as follows:

Slope.—The slope is 8 percent or more.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Depth to soft rock.—The depth to soft bedrock is less than 20 inches.

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Low bearing strength.—The AASHTO classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word "rubbly" is in the map unit name.

Forest Log Landing Considerations

Table 13 provides information regarding the use of the soils as log landings. Log landings are areas where logs are assembled for transportation. Areas that require little or no cutting, filling, or surface preparation are desired.

Considerations shown in the table are as follows:

Slope.—The slope is more than 3 percent.

Flooding.—The soil is occasionally flooded or frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Susceptible to rutting and wheel slippage (low strength).—The AASHTO

classification is A-6, A-7, or A-8 in any layer at a depth of 20 inches or less.

Rubbly surface.—The word "rubbly" is in the map unit name.

Forest Land Site Preparation and Planting Considerations

Table 14 provides information regarding considerations affecting site preparation and planting in areas used as forest land.

Considerations shown in the table are as follows:

Slope.—The upper slope limit is more than 15 percent.

Flooding.—The soil is frequently flooded.

Wetness.—The soil is somewhat poorly drained, poorly drained, or very poorly drained or has a perched zone in which the soil moisture status is wet (any drainage class).

Depth to hard rock.—The depth to hard bedrock is less than 20 inches.

Surface stones.—The word "stony" is in the map unit name.

Surface boulders.—The word "bouldery" is in the map unit name.

Areas of rock outcrop.—Rock outcrop is a named component in the map unit.

Water erosion.—The slope is 8 percent or more.

Potential poor tilth and compaction.—The AASHTO classification is A-6 or A-7 in the upper 10 inches.

Rubbly surface.—The word "rubbly" is in the map unit name.

Cobbly surface.—The word "cobbly" is in the map unit name.

Forest Habitat Types

Joseph A. Kovach, forest ecologist/silviculturist, Division of Forestry, Wisconsin Department of Natural Resources, helped prepare this section.

The forest habitat type classification system (FHTCS) is a site classification system based on the floristic composition of plant communities. The system depends on the

identification of potential climax associations, repeatable patterns in the composition of the understory vegetation, and differential understory species. It groups land units with similar capacity to produce vegetation. The floristic composition of the plant community is used as an integrated indicator of those environmental factors that affect species reproduction, growth, competition, and community development. This classification system enables the recognition of ecologically similar landscape units and vegetation communities. It is a system for classifying forest plant communities and the sites on which they develop.

A forest habitat type is an aggregation of sites (units of land) capable of producing similar late-successional (potential climax) forest plant communities. Each recognizable habitat type represents a relatively narrow segment of environmental variation that is characterized by a certain limited potential for vegetation development. Although at any given time a habitat type can support a variety of disturbance-induced (seral) plant communities, the ultimate product of succession is presumed to be a similar climax community. Field identification of a habitat type provides a convenient label (habitat type name) for a given site and places that site in the context of a larger group of sites that share similar ecological traits.

Forest habitat types are characterized by plant associations, not by individual indicator species. Differential (diagnostic) species combinations in the understory flora are used to identify habitat types at any successional stage, but these combinations have meaning only in the context of the specific habitat types or groups being compared.

The forest habitat types in Washburn County can be identified and interpreted using Field Guide to Forest Habitat Types of Northern Wisconsin, 2nd edition (Kotar and others, 2002). The guide provides keys to habitat type identification based on the presence or absence of differential understory species; describes the characteristic understory species composition, the common forest cover types, and the expected successional trends; and summarizes management implications for each habitat type. Management considerations include inherent site capability (biological potential), potential responses to disturbance, competition, successional trends, potential cover types, and expected suitability and productivity for specific tree species. Additional interpretive information is available in Wisconsin Forest Statistics, 1996: Analysis by Habitat Type Class (Kotar and others, 1999).

Although soil map units do not coincide exactly with habitat types, there is a strong correlation between them. Soil moisture and nutrient regimes are key factors determining habitat type occurrence. Habitat types for the soils in Washburn County are shown in table 15. A single habitat type is considered *dominant* if it constitutes more than 60 percent coverage (one habitat type that has more than 60 percent occurrence). If no habitat types are dominant but two types with 25 to 59 percent occurrence add up to more than 70 percent, then they would be considered *codominant*. A *common* habitat type is listed when the expected frequency of occurrence is 15 to 55 percent and the requirements for identification as codominant are not met.

The following paragraphs briefly describe the habitat types in the county. The types are listed in the following order: dry and nutrient-poor sites; mesic and nutrient-rich sites; wet-mesic sites (nutrient rich to nutrient poor); and wet sites.

Region 1 Habitat Types (predominant in Washburn County)

PQGCe—Pinus strobus-Quercus spp./Gaultheria procumbens-Ceanothus americanus habitat type. The common name is Eastern white pine-Oaks/ Wintergreen-New Jersey tea. The presumed potential climax overstory is dominated by eastern white pine and oaks (white oak, bur oak, northern red oak, and northern pin oak). Currently, common cover types include any mixture of jack pine, red pine, northern pin oak, and northern red oak. Aspen is an occasional dominant or associate,

whereas bur oak and white oak are occasional associates. The dominant ground flora commonly includes grasses and sedges, hazelnut, blueberry, blackberries, juneberry, wild rose, bracken fern, wild lily-of-the-valley, wintergreen, northern bedstraw, and oak seedlings.

The moisture regime is dry, and the nutrient regime is poor. The pines (jack pine, red pine, and white pine) exhibit moderate potential productivity. The timber productivity of other species is relatively poor, but the oaks do provide abundant mast for wildlife.

This habitat type is common on outwash plains in the northwestern part of the county.

PArVAm—Pinus strobus-Acer rubrum/Vaccinium angustifolium-Amphicarpa bracteata habitat type. The common name is Eastern white pine-Red maple/ Blueberry-Hog peanut. The presumed potential climax overstory is dominated by eastern white pine, red maple, northern red oak, and white oak. Currently, common cover types include any mixture of aspen, white oak, red oak, and red maple. Overstory associates include white birch, northern pin oak, bur oak, white pine, red pine, and jack pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, juneberry, blackberries, blueberry, bracken fern, bigleaf aster, hog peanut, wild sarsaparilla, and red maple seedlings.

The moisture regime is dry or dry-mesic, and the nutrient regime is poor or medium. All of the pines exhibit excellent potential productivity, but intense competition often limits opportunities for the establishment and maintenance of jack pine. Aspen and paper birch can exhibit good growth and productivity, but the oaks and red maple demonstrate only moderate productivity.

This habitat type is most common on outwash plains in the central part of the county, but it also occurs on moraines and glacial lake plains throughout much of the county.

AVDe—Acer saccharum/Vaccinium angustifolium-Desmodium glutinosum habitat type. The common name is Sugar maple/Blueberry-Pointed-leaved tick trefoil. The presumed potential climax overstory is dominated by sugar maple, red maple, American basswood, and white ash but may also include northern red oak, white oak, and eastern white pine. Currently, common cover types include any mixture of aspen, white oak, red oak, and red maple. Overstory associates include sugar maple, basswood, white pine, and white birch. The dominant ground flora commonly includes grasses and sedges, maple-leaved viburnum, hazelnut, blackberries, bracken fern, bigleaf aster, pointed-leaved tick trefoil, hog peanut, wild sarsaparilla, interrupted fern, ironwood, and red maple and sugar maple seedlings.

The moisture regime is dry-mesic, and the nutrient regime is medium. Trees exhibiting excellent potential productivity include white pine, red pine, white birch, and aspen. Also, white oak, red oak, and red maple can exhibit good growth and productivity. The mesic hardwoods (sugar maple, basswood, and white ash) offer only moderate to poor potential productivity.

This habitat type is common on rolling moraines and outwash plains throughout much of the county.

AAt—Acer saccharum/Athyrium filix-femina habitat type. The common name is Sugar maple/Lady fern. The presumed potential climax overstory is dominated by sugar maple, basswood, white ash, and red maple. Currently, common cover types include any mixture of northern red oak, white oak, red maple, sugar maple, and aspen. Common overstory associates include American basswood, white ash, eastern white pine, and white birch. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, ironwood seedlings, hazelnut, bigleaf aster, hog peanut, pointed-leaved tick trefoil, lady fern, interrupted fern, bracken fern, early meadow rue, sweet cicely, trilliums, sessile-leaved bellwort, wild sarsaparilla, and maple-leaved viburnum.

The moisture regime is dry-mesic, and the nutrient regime is medium or rich. Mesic hardwoods (sugar maple, basswood, white ash, and red maple) are very competitive, and potential productivity is good. Red oak, white oak, and white pine demonstrate excellent productivity but require significant disturbance for successful regeneration. Following severe disturbance, aspen and paper birch can demonstrate excellent productivity as pioneers.

This habitat type is common on moraines, outwash plains, and glacial lake plains in the southern part of the county.

ACaCi—Acer saccharum/Caulophyllum thalictroides-Circaea quadrisulcata habitat type. The common name is Sugar maple/Blue cohosh-Enchanter's nightshade. The presumed potential climax overstory is dominated by sugar maple, American basswood, and white ash. Currently, common cover types include any mixture of sugar maple, northern red oak, white oak, and aspen. Common associates are red maple, basswood, white ash, black cherry, and white birch. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, bigleaf aster, wild geranium, sweet cicely, lady fern, early meadow rue, trilliums, yellow violets, enchanter's nightshade, hog peanut, maidenhair fern, and black snakeroot.

The moisture regime is mesic or dry-mesic, and the nutrient regime is rich. Most tree species can exhibit excellent growth and productivity on these sites if establishment opportunities exist and competition is controlled. Northern hardwoods demonstrate excellent productive potential and competitive advantages. Oaks commonly are present but require aggressive management (significant disturbance) for regeneration.

This habitat type is somewhat common on moraines, outwash plains, and glacial lake plains in the southern part of the county.

ASal—Acer saccharum/Sanguinaria canadensis-Impatiens capensis habitat type. The common name is Sugar maple/Bloodroot-Jewelweed. The presumed potential climax overstory is dominated by sugar maple, red maple, white ash, green ash, black ash, American basswood, and yellow birch. Currently, common cover types include any mixture of aspen, red maple, oaks (red oak, white oak, and bur oak), basswood, and white birch. The dominant ground flora commonly includes grasses and sedges, lady fern, sweet cicely, jewelweed, bigleaf aster, wood anemone, trilliums, bloodroot, early meadow rue, gooseberry, sensitive fern, interrupted fern, wild geranium, Virginia creeper, Virginia waterleaf, enchanter's nightshade, black snakeroot, hog peanut, and hazelnut.

The moisture regime is wet-mesic or mesic, and the nutrient regime is rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good potential productivity. Mesic hardwoods (sugar maple, basswood, and white ash) are most competitive in the absence of disturbance, but productivity is only good to moderate. Mid-tolerant hardwoods that require some disturbance for regeneration but that demonstrate good to excellent productive potential are black ash and red maple.

This habitat type occurs on moraines, outwash plains, and glacial lake plains in the southern part of the county.

ArVRp—Acer rubrum/Vaccinium spp.-Rubus pubescens habitat type. The common name is Red maple/Blueberries-Dwarf raspberry. The presumed potential climax overstory is dominated by red maple and eastern white pine. Currently, aspen and red maple dominate most stands. Common associates and occasional dominants include white birch, pines (white pine, red pine, and jack pine), and oaks (white oak, bur oak, northern red oak, and northern pin oak). The dominant ground flora commonly includes grasses and sedges, hazelnut, bush honeysuckle, bunchberry, dwarf raspberry, swamp dewberry, bracken fern, interrupted fern, lady fern, bigleaf aster, wild lily-of-the-valley, sessile-leaved bellwort, wild sarsaparilla, and red maple seedlings.

The moisture regime is wet-mesic to dry-mesic, and the nutrient regime is poor or medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to moderate potential productivity. White pine offers the greatest growth potential.

This habitat type is mostly on outwash plains and glacial lake plains in the southern part of the county.

Region 3 Habitat Types (occurring only in northeastern and east-central Washburn County)

PArVAa—Pinus strobus-Acer rubrum/Vaccinium angustifolium-Aralia nudicaulis habitat type. The common name is Eastern white pine-Red maple/Low sweet blueberry-Wild sarsaparilla. The presumed potential climax overstory is dominated by eastern white pine and red maple but may include northern red oak, balsam fir, and white spruce. Currently, common cover types include any mixture of aspen, paper birch, red oak, red maple, white pine, and red pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, blackberries, blueberry, bush honeysuckle, bracken fern, wild sarsaparilla, wild lily-of-the-valley, bigleaf aster, starflower, barren strawberry, wintergreen, and red maple and balsam fir seedlings.

The moisture regime is dry or dry-mesic, and the nutrient regime is poor or medium. The pines exhibit excellent potential productivity, but intense competition often limits opportunities for the establishment and maintenance of jack pine. Aspen, paper birch, and white spruce can exhibit good growth and productivity, whereas red oak and red maple demonstrate only moderate productivity.

This habitat type occurs only in a small area on outwash plains in the east-central part of the county.

AVVb—Acer saccharum/Vaccinium angustifolium-Viburnum acerifolium habitat type. The common name is Sugar maple/Low sweet blueberry-Mapleleaf viburnum. The presumed potential climax overstory is dominated by sugar maple, red maple, and northern red oak. Currently, common cover types include any mixture of aspen, paper birch, red oak, red maple, sugar maple, and eastern white pine. The dominant ground flora commonly includes grasses and sedges, hazelnut, blackberries, mapleleaf viburnum, bracken fern, wild sarsaparilla, bigleaf aster, ironwood, and red maple and sugar maple seedlings.

The moisture regime is dry-mesic, and the nutrient regime is medium. Trees exhibiting excellent potential productivity include red pine, white pine, aspen, and paper birch. Also, red oak, red maple, and white spruce can exhibit good growth and productivity. Although it is common, sugar maple generally is of poor quality.

This habitat type occurs on the moraines and outwash plains in the northeastern part of the county.

ATM—Acer saccharum-Tsuga canadensis/Maianthemum canadense habitat type. The common name is Sugar maple-Eastern hemlock/Wild lily-of-the-valley. The presumed potential climax overstory is dominated by sugar maple, eastern hemlock, and yellow birch. Currently, common cover types include any mixture of sugar maple, red maple, aspen, paper birch, American basswood, northern red oak, white ash, yellow birch, balsam fir, and eastern hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, hazelnut, bush honeysuckle, bracken fern, spinulose shield fern, lady fern, wild sarsaparilla, wild lily-of-the-valley, bigleaf aster, beadlily, and starflower.

The moisture regime is mesic, and the nutrient regime is medium. Trees exhibiting good to excellent productive and competitive potential include sugar maple, basswood, white ash, yellow birch, and hemlock. Others demonstrating excellent productivity but limited competitive abilities include red maple, red oak, and white pine. Following severe disturbance, aspen and paper birch can demonstrate excellent productivity as pioneers.

This habitat type occurs on the moraines and outwash plains in the northeastern part of the county.

ATD—Acer saccharum-Tsuga canadensis/Dryopteris spinulosa habitat type. The common name is Sugar maple-Eastern hemlock/Spinulose shield fern. The presumed potential climax overstory is dominated by sugar maple, eastern hemlock, and yellow birch. Currently, most stands are dominated by sugar maple and aspen. Common overstory associates include basswood, white ash, red maple, red oak, yellow birch, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, spinulose shield fern, lady fern, wild lily-of-the-valley, and starflower.

The moisture regime is mesic, and the nutrient regime is medium or rich. Most trees can exhibit excellent growth and productivity if establishment opportunities exist and competition is controlled. Northern hardwoods and hemlock-hardwoods demonstrate excellent productive potential and competitive advantages.

This habitat type occurs on the moraines in the northeastern part of the county. AOCa—Acer saccharum/Osmorhiza claytonii-Caulophyllum thalictroides habitat type. The common name is Sugar maple/Sweet cicely-Blue cohosh. The presumed potential climax overstory is dominated by sugar maple. Currently, most stands are dominated by sugar maple and American basswood and some aspen. Common overstory associates include yellow birch, eastern hemlock, white ash, red maple, and black cherry. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, hazelnut, lady fern, spinulose shield fern, bigleaf aster, wild sarsaparilla, trilliums, sweet cicely, blue cohosh, and gooseberries.

The moisture regime is mesic, and the nutrient regime is rich. Most tree species can exhibit excellent growth and productivity if establishment opportunities exist and competition is controlled. Northern hardwoods demonstrate excellent productive potential and competitive advantages.

This habitat type occurs on the moraines in the northeastern part of the county. ACal—Acer saccharum/Caulophyllum thalictroides-Impatiens capensis habitat type. The common name is Sugar maple/Blue cohosh-Jewelweed. The presumed potential climax overstory is dominated by sugar maple. Currently, most stands are dominated by sugar maple, red maple, American basswood, and aspen. Common overstory associates include yellow birch, black ash, green ash, white ash, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple seedlings, lady fern, spinulose shield fern, blue cohosh, sweet cicely, jack-in-the-pulpit, trilliums, and gooseberries.

The moisture regime is wet-mesic or mesic, and the nutrient regime is rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to excellent potential productivity. Sugar maple growth and quality are good.

This habitat type occurs on the moraines in the northeastern part of the county. ATAtOn—Acer saccharum-Tsuga canadensis/Athyrium filix-femina-Onoclea sensibilis habitat type. The common name is Sugar maple-Eastern hemlock/Lady fern-Sensitive fern. The presumed potential climax overstory is dominated by sugar maple, red maple, yellow birch, and eastern hemlock. Currently, common cover types include any mixture of red maple, sugar maple, yellow birch, hemlock, basswood, black ash, green ash, and aspen. The dominant ground flora commonly includes grasses and sedges, red maple and sugar maple seedlings, hazelnut, blackberries, lady fern, spinulose shield fern, sensitive fern, horsetails, jewelweed, and bigleaf aster.

The moisture regime is wet-mesic or mesic, and the nutrient regime is medium or rich. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to excellent potential productivity. Sugar maple growth and quality are only moderate.

This habitat type occurs on the moraines in the northeastern part of the county.

TMC—Tsuga canadensis/Maianthemum canadense-Coptis groenlandica habitat type. The common name is Eastern hemlock/Wild lily-of-the-valley-Goldthread. The presumed potential climax overstory is dominated by eastern hemlock, yellow birch, red maple, and sugar maple. Currently, common cover types include any mixture of red maple, balsam fir, aspen, paper birch, sugar maple, yellow birch, and hemlock. The dominant ground flora commonly includes grasses and sedges, sugar maple and red maple seedlings, balsam fir seedlings, hazelnut, bracken fern, clubmosses, bunchberry, wild lily-of-the-valley, wild sarsaparilla, bigleaf aster, beadlily, and starflower.

The moisture regime is wet-mesic or mesic, and the nutrient regime is medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good potential productivity. Areas of this habitat type are not ideal for management of northern hardwoods because sugar maple growth and quality are limited.

This habitat type occurs on the moraines in the northeastern part of the county. ArAbVC—Acer rubrum-Abies balsamea/Vaccinium spp.-Coptis groenlandica habitat type. The common name is Red maple-Balsam fir/Blueberries-Goldthread. The presumed potential climax overstory is dominated by red maple, balsam fir, white spruce, and hemlock. Currently, common cover types include any mixture of aspen, paper birch, red maple, balsam fir, white spruce, white pine, and red pine. The dominant ground flora commonly includes grasses and sedges, red maple and balsam fir seedlings, hazelnut, blackberries, blueberries, bush honeysuckle, bracken fern, clubmosses, bunchberry, goldthread, wild lily-of-the-valley, wild sarsaparilla, bigleaf aster, beadlily, and starflower.

The moisture regime is wet-mesic to dry-mesic, and the nutrient regime is poor or medium. Although the characteristic dampness can limit tree growth and productivity, most of the commonly occurring tree species can exhibit good to moderate potential productivity.

This habitat type occurs only in a small area on outwash plains in the east-central part of the county.

Forest Lowland Habitat Types

No forested lowland habitat types have been defined and characterized. Currently, common lowland cover types include any mixture of northern white-cedar, tamarack, black spruce, balsam fir, black ash, red maple, and aspen. To help identify biological potentials, these poorly drained and very poorly drained sites can be subdivided into flood plain (Lfp), mineral soil lowland (Llmin), nonacid organic soil lowland (Lnorg), and acid organic soil lowland (Laorg). Forested lowlands are common throughout the county.

Recreation

The soils of the survey area are rated in tables 16a and 16b according to limitations that affect their suitability for recreation. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the recreational uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The ratings in the tables are based on restrictive soil features, such as wetness, slope, and texture of the surface layer. Susceptibility to flooding is considered. Not considered in the ratings, but important in evaluating a site, are the location and accessibility of the area, the size and shape of the area and its scenic quality, vegetation, access to water, potential water impoundment sites, and access to public sewer lines. The capacity of the soil to absorb septic tank effluent and the ability of the soil to support vegetation also are important. Soils that are subject to flooding are limited for recreational uses by the duration and intensity of flooding and the season when flooding occurs. In planning recreational facilities, onsite assessment of the height, duration, intensity, and frequency of flooding is essential.

The information in tables 16a and 16b can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope, stoniness, and depth to bedrock or a cemented pan are the main concerns affecting the development of camp areas. The soil properties that affect the performance of the areas after development are those that influence trafficability and promote the growth of vegetation, especially in heavily used areas. For good trafficability, the surface of camp areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Picnic areas are subject to heavy foot traffic. Most vehicular traffic is confined to access roads and parking areas. The ratings are based on the soil properties that affect the ease of developing picnic areas and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of picnic areas. For good trafficability, the surface of picnic areas should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level, are free of stones, and can withstand intensive foot traffic. The ratings are based on the soil properties that affect the ease of developing playgrounds and that influence trafficability and the growth of vegetation after development. Slope and stoniness are the main concerns affecting the development of playgrounds. For good trafficability, the surface of the playgrounds should absorb rainfall readily, remain firm under heavy foot traffic, and not be dusty when dry. The soil properties that influence trafficability are texture of the surface layer, depth to a zone in which the soil moisture status is wet, ponding, flooding, permeability, and large stones. The soil properties that affect the growth of plants are depth to bedrock or a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties

that affect trafficability and erodibility. These properties are stoniness, depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, and texture of the surface layer.

Off-road motorcycle trails require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely. The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a zone in which the soil moisture status is wet, ponding, flooding, and texture of the surface layer.

Golf fairways are subject to heavy foot traffic and some light vehicular traffic. Cutting or filling may be required. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer. The suitability of the soil for traps, tees, roughs, and greens is not considered in the ratings.

Wildlife Habitat

Soils affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the construction of water impoundments. The kind and abundance of wildlife depend largely on the amount and distribution of food, cover, and water. Wildlife habitat can be created or improved by planting appropriate vegetation, by maintaining the existing plant cover, or by promoting the natural establishment of desirable plants.

In table 17, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

The potential of the soil is rated good, fair, poor, or very poor. A rating of *good* indicates that the element or kind of habitat is easily established, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected. A rating of *fair* indicates that the element or kind of habitat can be established, improved, or maintained in most places. Moderately intensive management is required for satisfactory results. A rating of *poor* indicates that limitations are severe for the designated element or kind of habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and must be intensive. A rating of *very poor* indicates that restrictions for the element or kind of habitat are very severe and that unsatisfactory results can be expected. Creating, improving, or maintaining habitat is impractical or impossible.

The elements of wildlife habitat are described in the following paragraphs. *Grain and seed crops* are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, soybeans, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth

of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are bromegrass, timothy, orchardgrass, clover, alfalfa, wheatgrass, and birdsfoot trefoil.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestems, indiangrass, blueberry, goldenrod, lambsquarters, dandelions, blackberry, ragweed, and nightshade.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, box elder, birch, maple, green ash, willow, and American elm. Examples of fruit-producing shrubs that are suitable for planting on soils rated *good* are Russian olive and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, cedar, and tamarack.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweeds, wild millet, rushes, sedges, bulrushes, wild rice, arrowhead, waterplantain, cattail, prairie cordgrass, bluejoint grass, asters, and beggarticks.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are waterfowl feeding areas, wildlife watering developments, beaver ponds, and other wildlife ponds.

The habitat for various kinds of wildlife is described in the following paragraphs. Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include Hungarian partridge, ring-necked pheasant, bobwhite quail, sharp-tailed grouse, meadowlark, field sparrow, killdeer, cottontail rabbit, and red fox.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, ruffed grouse, thrushes, woodpeckers, owls, tree squirrels, porcupine, raccoon, white-tailed deer, and black bear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, bitterns, rails, kingfishers, muskrat, otter, mink, and beaver.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on

observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about particle-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 to 7 feet of the surface, soil wetness, depth to a zone in which the soil moisture status is wet, ponding, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kinds of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the Glossary.

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 18a and 18b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning,

design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a zone in which the soil moisture status is wet, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a zone in which the soil moisture status is wet, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a zone in which the soil moisture status is wet, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and

compacting. Depth to a seasonal zone in which the soil moisture status is wet, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to a zone in which the soil moisture status is wet, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a zone in which the soil moisture status is wet; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a zone in which the soil moisture status is wet, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 19a and 19b show the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth

to a zone in which the soil moisture status is wet, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if a saturated zone is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A trench sanitary landfill is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a zone in which the soil moisture status is wet, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a zone in which the soil moisture status is wet, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or a saturated zone is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow

along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a zone in which the soil moisture status is wet, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or a saturated zone to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Construction Materials

Tables 20a and 20b give information about the soils as potential sources of gravel, sand, reclamation material, roadfill, and topsoil. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and gravel are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 20a, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good*, *fair*, or *poor* as potential sources of gravel or sand. A rating of *good* or *fair* means that the source material is likely to be in or below the soil. The bottom layer and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

In table 20b, the soils are rated *good*, *fair*, or *poor* as potential sources of reclamation material, roadfill, and topsoil. The features that limit the soils as sources of these materials are specified in the table. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of reclamation material, roadfill, or topsoil. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of

reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a zone in which the soil moisture status is wet, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a zone in which the soil moisture status is wet, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a zone in which the soil moisture status is wet, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Water Management

Table 21 gives information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the table indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is

determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A wet zone high in the soil profile affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a zone in which the soil moisture status is wet, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Agricultural Waste Management

Soil properties are important considerations in areas where soils are used as sites for the treatment and disposal of organic waste and wastewater. Selection of soils with properties that favor waste management can help to prevent environmental damage.

Tables 22a and 22b show the degree and kind of soil limitations affecting the treatment of agricultural waste, including municipal and food-processing wastewater and effluent from lagoons or storage ponds. Municipal wastewater is the waste stream from a municipality. It contains domestic waste and may contain industrial waste. It may have received primary or secondary treatment. It is rarely untreated sewage. Food-processing wastewater results from the preparation of fruits, vegetables, milk, cheese, and meats for public consumption. In places it is high in content of sodium and chloride. In the context of these tables, the effluent in lagoons and storage ponds is from facilities used to treat or store food-processing wastewater or domestic or animal waste. Domestic and food-processing wastewater is very dilute, and the effluent from the facilities that treat or store it commonly is very low in content of carbonaceous and nitrogenous material; the content of nitrogen commonly ranges from 10 to 30 milligrams per liter. The wastewater from animal waste treatment lagoons or storage ponds, however, has much higher concentrations of these materials, mainly because the manure has not been diluted as much as the domestic waste. The content of nitrogen in this wastewater generally ranges from 50 to 2,000 milligrams per liter. When wastewater is applied, checks should be made to ensure that nitrogen, heavy metals, and salts are not added in excessive amounts.

The ratings in the tables are for waste management systems that not only dispose of and treat organic waste or wastewater but also are beneficial to crops (application of manure and food-processing waste and application of sewage sludge) and for waste

management systems that are designed only for the purpose of wastewater disposal and treatment (rapid infiltration of wastewater and slow rate treatment of wastewater).

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect agricultural waste management. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Rapid infiltration of wastewater is a process in which wastewater applied in a level basin at a rate of 4 to 120 inches per week percolates through the soil. The wastewater may eventually reach the ground water. The application rate commonly exceeds the rate needed for irrigation of cropland. Vegetation is not a necessary part of the treatment; hence, the basins may or may not be vegetated. The thickness of the soil material needed for proper treatment of the wastewater is more than 72 inches. As a result, geologic and hydrologic investigation is needed to ensure proper design and performance and to determine the risk of ground-water pollution.

The ratings in the table are based on the soil properties that affect the risk of pollution and the design, construction, and performance of the system. Depth to a saturated zone, ponding, flooding, and depth to bedrock or a cemented pan affect the risk of pollution and the design and construction of the system. Slope, stones, and cobbles also affect design and construction. Permeability and reaction affect performance. Permanently frozen soils are unsuitable for waste treatment.

Slow rate treatment of wastewater is a process in which wastewater is applied to land at a rate normally between 0.5 inch and 4.0 inches per week. The application rate commonly exceeds the rate needed for irrigation of cropland. The applied wastewater is treated as it moves through the soil. Much of the treated water may percolate to the ground water, and some enters the atmosphere through evapotranspiration. The applied water generally is not allowed to run off the surface. Waterlogging is prevented either through control of the application rate or through the use of tile drains, or both.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, and the application of waste. The properties that affect absorption include the sodium adsorption ratio, depth to a saturated zone, ponding, available water capacity, permeability, depth to bedrock or a cemented pan, reaction, the cation-exchange capacity, and slope. Reaction, the sodium adsorption ratio, salinity, and bulk density affect plant growth and microbial activity. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood of wind erosion or water erosion. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of manure and food-processing waste not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. Manure is the excrement of livestock and poultry, and food-processing waste is damaged fruit and vegetables and the peelings, stems, leaves, pits, and soil particles removed in food preparation. The manure and the food-processing waste are either solid, slurry, or liquid. Their nitrogen content

varies. A high content of nitrogen limits the application rate. Toxic or otherwise dangerous wastes, such as those mixed with the lye used in food processing, are not considered in the ratings.

The ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

Application of sewage sludge not only disposes of waste material but also can improve crop production by increasing the supply of nutrients in the soils where the material is applied. In the context of this table, sewage sludge is the residual product of the treatment of municipal sewage. The solid component consists mainly of cell mass, primarily bacteria cells that developed during secondary treatment and have incorporated soluble organics into their own bodies. The sludge has small amounts of sand, silt, and other solid debris. The content of nitrogen varies. Some sludge has constituents that are toxic to plants or hazardous to the food chain, such as heavy metals and exotic organic compounds, and should be analyzed chemically prior to use.

The content of water in the sludge ranges from about 98 percent to less than 40 percent. The sludge is considered liquid if it is more than about 90 percent water, slurry if it is about 50 to 90 percent water, and solid if it is less than about 50 percent water.

The ratings in the table are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the sludge is applied, and the method by which the sludge is applied. The properties that affect absorption, plant growth, and microbial activity include permeability, depth to a saturated zone, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, available water capacity, reaction, salinity, and bulk density. The wind erodibility group, the soil erodibility factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a wet zone in the soil profile, ponding, and flooding can hinder the application of sludge. Permanently frozen soils are unsuitable for waste treatment.

Table 3.--Temperature and Precipitation (Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

	Temperature						Precipitation				
	Average Average daily maximum minimum	 	 	2 years in 10 will have		number of	 Average 	2 years in 10 will have		 	
		i	Maximum	 Minimum temperature lower than	Less				Average number of days with 0.10 inch or more	snowfall	
	°F	°F	°F	°F	°F	Units	In	In	In		In
January	 21.5 	 -0.1 	 10.7 	46	 -36 	 0 	 0.87 	 0.39 	 1.33 	 2 	 13.8
February	29.0	6.4	17.7	52	-33	2	.66	.22	1.04	2	7.5
March	 40.6 	 18.7 	 29.7 	67	 -18 	 29 	 1.43 	 .78 	 2.02 	 3 	 8.3
April	56.6	31.5	44.1	81	7	187	2.20	.95	3.43	5	2.6
May	 70.2 	 43.2	 56.7 	87	 23	 514 	 3.05	 1.79	 4.27	 6 	.0
June	77.6	52.2	64.9	91	32	743	3.98	2.72	5.15	7	.0
July	 81.4 	 57.2	 69.3	95	 40	908	 4.21	 2.07	 6.09	 6 	.0
August	78.9	55.1	67.0	92	36	837	4.64	2.83	6.33	7	.0
September	 69.7 	 46.7	 58.2 	 87	 27 	 545 	 3.68	 1.81	 5.45	 7 	.0
October	 57.8	35.9	46.9	80	 15	247	2.58	1.42	3.68	 6	.7
November	 39.1	22.8	31.0	65	 -8	 33	1.90	.72	2.92	 4	7.8
December	 25.2	 7.2	 16.2	48	 -28	 1	 .85	.38	1.27	 2	11.0
Yearly:	 	 	 		 	 	 	 	 	 	
Average	 54.0 	 31.4 	 42.7 		 	 	 	 	 	 	
Extreme	 101	 -44	 	95	 -37	 	 	 	 	 	
Total		 				4,048	30.05	24.95	35.02	57	51.8

^{*} A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

Table 4.--Freeze Dates in Spring and Fall
(Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

İ	Temper		ature			
Probability	24	o _F	28	o _F	32	o _F
<u> </u>	or lo	wer	or lo	wer	or lo	wer
Last freezing			 		i I	
temperature in spring:					 	
1 year in 10						
later than	May	6	May	20	June	9
2 years in 10						
later than	May	2	May	15	June	2
5 years in 10	_		į	_	į	
later than	Apr.	24	May	7	May	20
First freezing						
temperature in fall:					 	
1 year in 10						
earlier than	Sept.	30	Sept.	. 18	Sept.	10
2 years in 10	0 1-	_		0.0		1.4
earlier than	Oct.	5	Sept.	. 22	Sept.	14
5 years in 10	Oct.	16	Comb	2.0	Cont	22
earlier than	UCT.	ТР	Sept.	. 30	Sept.	22

Table 5.--Growing Season

(Recorded in the period 1971-2000 at Spooner Experiment Farm, Wisconsin)

	Daily minimum temperature during growing season		
Probability			
	Higher	Higher	Higher
	than	than	than
	24 ^O F	28 ^O F	32 °F
	Days	Days	Days
9 years in 10	150	126	102
8 years in 10	158	133	109
5 years in 10	174	145	123
2 years in 10	189	158	137
1 year in 10	197	164	144

Table 6.--Cropland Management Considerations

(See text for a description of the considerations listed in this table)

Map symbol and	Cropland management
soil name	considerations
3A:	
Totagatic	Flooding
	Excessive permeability
	High content of organic matter Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Bowstring	Flooding
	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Augabla	
Ausable	Flooding Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	 Wet soil moisture status
22A:	
Comstock	Acid soil
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
0.43	
24A: Poskin	Excessive permeability
POSKIII	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
27A:	
Scott Lake	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
28B:	
Haugen, very stony	
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
28B:	
Haugen	Acid soil
j	Dense layer
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
	Wind erosion
Rosholt, very stony	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wind erosion
Rosholt	Excessive permeability
j	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
28C:	
Haugen, very stony	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status Wind erosion
i	wind erosion
Haugen	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
i i	Wind amonion
	Wind erosion
Rosholt, very stony	
Rosholt, very stony	Excessive permeability Limited available water capacity
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones
Rosholt, very stony	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability Limited available water capacity
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability Limited available water capacity Potential for ground-water contamination
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
	Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion Excessive permeability Limited available water capacity Potential for ground-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
33B:	
Chetek	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
33C: Chetek	Acid soil
Checek	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
38A:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
İ	
38B:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
38C:	
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
202	
38D: Rosholt	 Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for ground-water contamination Potential for surface-water contamination
	•
	Water erosion Wind erosion
	wind erosion
42D:	
Amery	Acid soil
j	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
43B:	
Antigo	
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
40.5	
43C:	T
Antigo	
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
43D:	
	Clana
Antigo	_
	Excessive permeability Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	water erosion
48A:	
Brill	Excessive permeability
BIIII	Potential for ground-water contamination
	Wet soil moisture status
	wet soil moistule status
63A:	
Crystal Lake	Acid soil
01/2001 1000	Potential for ground-water contamination
	Wet soil moisture status
63B:	
Crystal Lake	Acid soil
- i	Potential for ground-water contamination
İ	Potential for surface-water contamination
	Water erosion
	Wet soil moisture status
63C:	
Crystal Lake	Acid soil
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wet soil moisture status
63E:	
Crystal Lake	
	Slope
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
643	
64A:	Planting
Totagatic	
	Excessive permeability
	High content of organic matter
	Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
	<u> </u>
64A:	
Winterfield	Flooding
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status Wind erosion
	Wind erosion
69B:	
Keweenaw	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Surface stones
	Wind erosion
Correct	Acid soil
Sayner	ACIG SOII Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Surface stones
	Wind erosion
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Surface stones
	Wind erosion
69C:	
Keweenaw	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Surface stones Water erosion
	Wind erosion
_	
Sayner	Acid soil Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wind erosion
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion Wind erosion
69E:	
Keweenaw	Slope
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Surface stones
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
	<u> </u>
69E:	
Sayner	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
	Wind erosion
	Hill Globion
Vilas	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion Wind erosion
	wind erosion
74B:	
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
74C:	
Vilas	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
74D:	
Vilas	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
100B:	
Menahga	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion
100C:	[
Menahga	Acid soil
-	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
100D	
100D: Menahga	Acid soil
nonungu	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
127D:	
Amery	Acid soil
	Slope
	Dense layer Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Water erosion
	Wind erosion
127E:	
Amery	Acid soil
	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability Surface stones
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Water erosion
	Wind erosion
156B:	
Magnor, very stony	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones Water erosion
	Wet soil moisture status
	•

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
156B:	
Magnor	
	Dense layer Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
i	Water erosion
	Wet soil moisture status
157B:	Para la la la la la la la la la la la la la
Freeon, very stony	Dense layer Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
İ	Water erosion
	Wet soil moisture status
The same	Para 1
Freeon	Dense layer Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
i	Water erosion
	Wet soil moisture status
157C:	
Freeon, very stony	Dense layer Potential for ground-water contamination
	Potential for ground-water contamination Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
Freeon	Dense layer
riecon	Potential for ground-water contamination
	Potential for surface-water contamination
İ	Restricted permeability
	Water erosion
	Wet soil moisture status
160A:	
Oesterle	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
İ	Wet soil moisture status
	Wind erosion
182B:	
Padus	Acid soil
-	Excessive permeability
	Potential for ground-water contamination
İ	Potential for surface-water contamination
1	Water erosion
	Wind erosion
182C:	
Padus	Acid soil
i	Excessive permeability
İ	Potential for ground-water contamination
İ	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

25	
Map symbol and soil name	Cropland management considerations
DOLL HAMO	
192A:	
Worcester	Acid soil
	Excessive permeability Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
193A:	
Minocqua	Excessive permeability
-	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
215B:	
Pence	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination Potential for surface-water contamination
	Water erosion
	Wind erosion
215C:	
Pence	Acid soil Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
215D:	
Pence	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination Potential for surface-water contamination
	Water erosion
	Wind erosion
2153	
315A: Rib	Excessive permeability
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
337A:	
Plover	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
368B:	
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
260D -	
368B: Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Water erosion
	Wind erosion
368C:	
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Potential for surface-water contamination
	Water erosion
	Wind erosion
Cress	 Acid soil
C1688	ACIG SOII Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion
260D.	
368D: Mahtomedi	 Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Cress	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
371A:	
Croswell	
	Limited available water capacity Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
380B:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Man many 2 - 2 - 2	
Map symbol and soil name	Cropland management considerations
SOII name	Considerations
2005	
380B: Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
380C:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Rosholt	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
2000	
380D: Cress	Acid soil
02000	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Rosholt	Slope
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
383B:	
Mahtomedi	Excessive permeability
	Limited available water capacity
j	Limited content of organic matter
	Potential for ground-water contamination
	Wind erosion
383C:	
Mahtomedi	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
002D.	
383D: Mahtomedi	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
396B:	
Friendship	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Wind erosion
Wurtsmith	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
Grayling	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
397A:	
Perchlake	Excessive permeability
	Limited available water capacity Limited content of organic matter
	Potential for ground-water contamination
	Wet soil moisture status
	Wind erosion
399B:	
Grayling	Acid soil
<u>/</u> g	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
399C:	
Grayling	
	Excessive permeability
	Limited available water capacity Potential for ground-water contamination
	Potential for ground-water contamination
	Water erosion
	Wind erosion
399D:	
Grayling	Acid soil
	Slope
Grayiing	
Glayling	Excessive permeability
GLAYIING	Limited available water capacity
Glayling	Limited available water capacity Potential for ground-water contamination
Glayling	Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination
Graying	Limited available water capacity Potential for ground-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
405A:	
Lupton	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Cathro	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Tawas	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
406A:	
Loxley	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
407A: Seelyeville	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Markey	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
410A:	
	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Cathro	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
412A:	
	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management	
soil name	considerations	
	<u> </u>	
412A:		
Tacoosh	High content of organic matter Ponding	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Wet soil moisture status	
415A:		
Greenwood	High content of organic matter	
	Ponding	
	Potential for ground-water contamination Potential for surface-water contamination	
	Wet soil moisture status	
439B:		
Graycalm	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination Wind erosion	
	wind erosion	
Menahga	Acid soil	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination Wind erosion	
439C: Graycalm	 Excessive permeability	
Gray Carm	Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion Wind erosion	
	wind erosion	
Menahga	Acid soil	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	
439D:		
Graycalm	Slope	
	Excessive permeability Limited available water capacity	
	Limited content of organic matter	
	Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	
Menahga	!	
	Slope	
	Excessive permeability	
	Limited available water capacity	
	Limited content of organic matter Potential for ground-water contamination	
	Potential for surface-water contamination	
	Water erosion	
	Wind erosion	

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
441C:	
Freeon	 Dense layer
riceon	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
	Wet soil moisture status
Cathro	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
442C:	
Haugen	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wet soil moisture status
	Wind erosion
Greenwood	Excessive permeability
G1eenwood	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
443D: Amery	 Acid soil
Amery	Slope
	Dense layer
	Potential for surface-water contamination
	Restricted permeability
	Surface stones
	Water erosion
	Wind erosion
Greenwood	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
461A:	
Bowstring	Flooding
-	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
484A:	
Greenwood	Excessive permeability
	High content of organic matter
İ	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Beseman	High content of organic matter
	Ponding
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
495B:	
*yos: Karlsborg	Excessive permeability
,	Limited available water capacity
İ	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status
	Wind erosion
Grettum	Excessive permeability
İ	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
Perida	Excessive permeability
101144	Limited available water capacity
i	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wind erosion
495C:	
Karlsborg	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status Wind erosion
Grettum	Excessive permeability
	Limited available water capacity
l l	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion Wind erosion
i	
Perida	
	Limited available water capacity
	Timited
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for ground-water contamination Potential for surface-water contamination
	Potential for ground-water contamination Potential for surface-water contamination Restricted permeability
	Potential for ground-water contamination Potential for surface-water contamination

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
495D:	
Karlsborg	Slope
3	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
	Wind erosion
Grettum	Slope
	Excessive permeability
	Limited available water capacity Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
Perida	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Restricted permeability
	Water erosion
	Wind erosion
4073	
497A: Meenon	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status Wind erosion
515A:	
Manitowish	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
521A:	
Dody	
	High content of organic matter
	Limited available water capacity Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Wet soil moisture status
524E:	
Rock outcrop.	

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
524E:	
Frogcreek	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
	Wet soil moisture status
Metonga	Acid soil Slope Depth to rock Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Water erosion
	Wind erosion
542B: Haugen, very stony	 Acid soil
	Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Water erosion Wet soil moisture status Wind erosion
Haugen	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wet soil moisture status Wind erosion
542C:	
Haugen, very stony	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Water erosion Wet soil moisture status Wind erosion
Haugen	Acid soil Dense layer Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wet soil moisture status Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
i	
543B:	
Anigon	Excessive permeability
	Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
543C2:	
Anigon	Excessive permeability
	Potential for ground-water contamination Potential for surface-water contamination
	Previously eroded
	Water erosion
544F: Menahga	Acid soil
	Slope
İ	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Potential for surface-water contamination
	Water erosion
	Wind erosion
Mahtomedi	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
555A:	
Fordum	Flooding
	Excessive permeability
	Ponding
	Potential for ground-water contamination Potential for surface-water contamination
	Wet soil moisture status
574R.	
574B: Sayner	Acid soil
	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
574C:	
Sayner	Acid soil
I	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination Potential for surface-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
574E:	 - Agid goil
Sayner	Acid soil Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
579B:	
Parkfalls	Dense layer Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wet soil moisture status Wind erosion
600A:	
Haplosaprists	Onsite investigation required
Psammaquents	Onsite investigation required
615B: Cress	Acid soil Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Water erosion Wind erosion
615C: Cress	Acid soil Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
615D: Cress	Acid soil Slope Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
623A: Capitola	High content of organic matter Limited available water capacity Ponding Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
624A: Ossmer	Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
632A: Aftad	 Potential for ground-water contamination Wet soil moisture status Wind erosion
632B: Aftad	Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
632C: Aftad	Potential for ground-water contamination Potential for surface-water contamination Water erosion Wet soil moisture status Wind erosion
633F: Pence	Acid soil Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
Padus	Acid soil Slope Excessive permeability Potential for ground-water contamination Potential for surface-water contamination Water erosion Wind erosion
648B: Sconsin	Dense layer Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Water erosion Wet soil moisture status
670C: Keweenaw	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
670C:	
Pence	Acid soil
	Excessive permeability Limited available water capacity
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
	Wind erosion
670E:	
Keweenaw	Slope
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
j	Potential for surface-water contamination
	Surface stones
	Water erosion Wind erosion
	WING GLOSION
Pence	Acid soil
	Slope Excessive permeability
	Limited available water capacity
İ	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones Water erosion
j	Wind erosion
CELL	
671B: Spoonerhill, stony	Dense layer
Specifically, Seeing	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Surface stones Water erosion
	Wet soil moisture status
Spoonerhill	Dense layer
i	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Water erosion
j	Wet soil moisture status
680B:	
Stanberry, stony	Dense layer
Stamperry, Stony	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Potential for surface-water contamination
	Surface stones
İ	Water erosion
	Wet soil moisture status
· ·	Wind erosion
Pence, stony	Acid soil
	Excessive permeability
	Limited available water capacity Potential for ground-water contamination
i	Potential for surface-water contamination
İ	Surface stones
	Water erosion
	Wind erosion
l de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
683A: Tipler	Acid soil Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
706A: Winterfield	Flooding Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
Totagatic	Flooding Excessive permeability Limited available water capacity Limited content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status Wind erosion
724A: Rib	Excessive permeability Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Rock outcrop.	
726B: Sissabagama	Excessive permeability Limited available water capacity Potential for ground-water contamination Wind erosion
733A: Wozny	Dense layer High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Surface stones Wet soil moisture status
771A: Lenroot	Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
827A: Scoba	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
353C:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Stinnett	 Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Wozny	 Dense layer
	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Wet soil moisture status
356B:	
Stinnett	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
857B:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
857C:	[
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
873B:	
Stanberry	Dense layer
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Cropland management considerations
Dense layer
Slope Dense layer Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wet soil moisture status Wind erosion
Acid soil Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wind erosion
Acid soil Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion
Slope Dense layer Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wet soil moisture status Wind erosion
High content of organic matter
Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
Excessive permeability Potential for ground-water contamination Wet soil moisture status

Table 6.--Cropland Management Considerations--Continued

Map symbol and soil name	Cropland management considerations
970C:	
Keweenaw	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Pence	Acid soil Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion
Greenwood	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
970E:	
Keweenaw	Slope Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion
Pence	Acid soil Slope Excessive permeability Limited available water capacity Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion Wind erosion
Greenwood	Excessive permeability High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status
1070C:	
Fremstadt	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
1070C:	
Cress	Acid soil
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Water erosion
	Wind erosion
	Wind erosion
1070D:	
Fremstadt	Slope
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Potential for surface-water contamination
	Surface stones
	Water erosion
Cress	Acid soil
	Slope
	Excessive permeability
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Potential for surface-water contamination
	Water erosion
	Wind erosion
1080B:	
Spoonerhill	Dense layer
	Limited available water capacity
	Limited content of organic matter Potential for ground-water contamination
	Water erosion
	Wet soil moisture status
Spoonerhill, stony	
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination Surface stones
	Water erosion
	Wet soil moisture status
Cress	·
	Excessive permeability
	Limited available water capacity Limited content of organic matter
	Limited content or organic matter Potential for ground-water contamination
	Water erosion
	Wind erosion
1653C:	
Stanberry	:
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Surface stones Water erosion
	Wet soil moisture status
	Wind erosion

Table 6.--Cropland Management Considerations--Continued

Table 0Clopiand Management ConsiderationsContinued						
Map symbol and soil name	Cropland management considerations					
1653C:						
Parkfalls	Limited available water capacity Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Surface stones Water erosion					
Wozny	Wet soil moisture status Wind erosion Dense layer					
-	High content of organic matter Ponding Potential for ground-water contamination Potential for surface-water contamination Surface stones					
	Wet soil moisture status					
2015. Pits						
2050. Landfill						
3011A: Barronett	Ponding Potential for ground-water contamination Potential for surface-water contamination Wet soil moisture status					
3125A: Meehan	Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion					
3126A: Wurtsmith	Acid soil Excessive permeability Limited available water capacity Potential for ground-water contamination Wet soil moisture status Wind erosion					
3276A: Au Gres	Acid soil Excessive permeability Limited available water capacity Limited content of organic matter Potential for ground-water contamination Wet soil moisture status Wind erosion					
3312B: Glendenning, very stony	Acid soil Dense layer Limited content of organic matter Potential for ground-water contamination Potential for surface-water contamination Restricted permeability Surface stones Water erosion Wet soil moisture status					

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
i	
3312B: Glendenning	Acid soil
Grendenning	Dense layer
	Limited content of organic matter
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability
	Water erosion
	Wet soil moisture status
22267.	
3336A: Fenander	Ponding
I change	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
	Wind erosion
24023	
3403A: Loxley	Excessive permeability
· -2	High content of organic matter
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Beseman	High content of organic matter
Deseman	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
Dawson	Acid soil
	Excessive permeability
	High content of organic matter
	Ponding
	Potential for ground-water contamination Potential for surface-water contamination
	Wet soil moisture status
3424C:	
Frogcreek	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination Surface stones
	Water erosion
	Wet soil moisture status
Magroc	·
	Potential for ground-water contamination
	Potential for surface-water contamination
	Restricted permeability Surface stones
	Surface stones Water erosion
	Water erosion Wet soil moisture status
	Net boll Melbeare beacab
Stinnett	Acid soil
	Dense layer
	Potential for ground-water contamination
	Potential for surface-water contamination
	Surface stones
	Water erosion
	Wet soil moisture status
Rock outcrop.	

Table 6.--Cropland Management Considerations--Continued

Map symbol and	Cropland management
soil name	considerations
3446A:	
Newson	Acid soil
İ	Excessive permeability
	High content of organic matter
	Limited available water capacity
	Ponding
	Potential for ground-water contamination
	Potential for surface-water contamination
	Wet soil moisture status
3448B:	
Grettum	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
3448C:	
Grettum	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Water erosion
	Wind erosion
3516A:	
Slimlake	Excessive permeability
	Limited available water capacity
	Potential for ground-water contamination
	Wind erosion
3629B:	
Perida	Excessive permeability
	Limited available water capacity
	Limited content of organic matter
	Potential for ground-water contamination
	Restricted permeability Wind erosion
	HIM GLOSION
M-W.	
Miscellaneous water	
w.	

Table 7.--Land Capability and Yields per Acre of Crops and Pasture

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Yields for stony or very stony map units are based on the assumption that the stones have been removed. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil)

Map symbol and soil name	Land capability	Soybeans	Timothy-red clover hay	Bromegrass- alfalfa hay	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
 BA							 	
Totagatic	7w							
Bowstring	7w							
Ausable	7w							
	2w	30	3.4	3.6	90	14	4.0 4.0	70
24A Poskin	2w	28	3.2	3.4 3.4	85	 14 	 3.8 	65
27A Scott Lake	2s	28	3.2	3.4 3.4	85	 14 	 3.8 	65
 		28	3.2	3.4	85	14	 3.8	65
Haugen, very stony	4s			i i		i	i	
Haugen	2e			i i		i	i i	
Rosholt, very stony	4s			i i		i	i i	
Rosholt	2s		į	į į		j	į į	
 		26	3.0	3.2	80	13	 3.6	65
Haugen, very stony	6s			i i		i	i i	
Haugen	3e			i i		i	i i	
Rosholt, very stony	6s			i i		i	i i	
Rosholt	3 e		į	į į		į	i i	
33B Chetek	3s	22	2.6	2.8 	70	12	3.2 3.2	60
33C Chetek	4e	20	2.4	2.6 2.6	65	12	3.0 3.0	55
88A Rosholt	2s	28	3.2	3.4 3.4	85	 14 	 3.8 	65
8B Rosholt	2s	26	3.0	3.2 3.1	80	 13 	 3.6 	6!
 8C Rosholt	3 e	24	2.8	3.0	75	13	3.4	6

^{*} See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Soybeans	Timothy-red	alfalfa hay	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
8D Rosholt	4e	22	2.6	2.8	70	12	3.2	 60
2D Amery	6s	24	2.8	3.0	75	13	 3.4 	 60
3B Antigo	2e	30	3.4	3.6	90	 14 	 4.0 	 70
3C Antigo	3e	28	3.2	3.4	85	 14 	 3.8 	 65
3D Antigo	6e	26	3.0	3.2	80	13	 3.6 	 65
8A Brill	2s	30	3.4	3.6	90	 14 	 4.0 	 70
3A Crystal Lake	1	34	3.6	4.0	100	 15 	 4.2 	 75
3B Crystal Lake	2e	32	3.6	3.8	95	 15 	 4.2 	 70
3C Crystal Lake	3e	30	3.4	3.6	90	 14 	 4.0 	 70
3E Crystal Lake	6e	28	3.2	3.4	85	 14 	 3.8 	 65
4A Totagatic Winterfield	7w 4w		 	 		 	 	
9B Keweenaw	3s		1.6		45	10	2.2	40
Sayner Vilas	4s 4s						 	
9C Keweenaw	4s		1.6	1.6	40	9	 2.2 	 35
Sayner Vilas	6s		1					

^{*} See footnote at end of table.

Map symbol Land Soybeans | Timothy-red | Bromegrass-Corn |Corn silage | Kentucky Oats and soil name capability clover hay alfalfa hay bluegrass Tons Tons AUM* Bu Tons Bu Bu 69E-------1.2 1.4 35 9 1.8 30 Keweenaw-----7s Sayner-----7 s Vilas-----7s 74B-----4s---1.8 ---50 10 2.4 45 Vilas 74C-----1.8 2.0 50 10 2.4 45 6s ---Vilas 74D-----| 7 s 1.4 1.6 40 9 2.0 35 Vilas 100B-----4s1.4 1.6 40 9 2.0 35 Menahga 100C-----6s 1.2 1.4 35 9 1.8 30 ---Menahga 100D-----7s 1.0 1.2 30 8 1.6 25 ---Menahga 127D-----| 24 2.8 3.0 75 13 3.4 60 Amery-----6s Rosholt-----6s 127E--------------------------Amery-----7 s Rosholt-----7s 156B-----28 3.2 3.4 85 14 3.8 65 Magnor, very stony-----4sMagnor-----2w 157B-----| 32 3.6 3.8 95 15 4.2 70 Freeon, very stony-----4sFreeon-----2e 157C-----30 3.4 3.6 90 14 4.0 70 Freeon, very stony-----Freeon-----3 e 160A-----2w 26 3.0 3.2 80 13 3.6 65 Oesterle

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

* See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Soybeans	Timothy-red clover hay Tons	Bromegrass- alfalfa hay Tons	Corn	Corn silage	Kentucky bluegrass AUM*	Oats Bu
l I		ьu	lons	l	ьu	l	AUM*	Bu
.82B	2e	30	3.4		90	14	4.0	70
Padus	Ì		İ	İ		İ	ĺ	ĺ
182C Padus	3e	28	3.2		85	14	3.8	65
L92A	2w	26	3.0	i i	80	13	3.6	65
Worcester	I		Į.					
 	6w						 	
Minocqua	ow							
minocqua								
215B	3s	24	2.8	i i	75	13	3.4	60
Pence								
215C								
Pence	4e	22	2.6		70	12	3.2	60
rence			I				 	
215D	6e		1.8	2.0	50	10	2.4	4!
Pence	İ		İ	İ		İ	ĺ	ĺ
315A Rib	6w							
KID								
337A	2w	26	3.0	3.2	80	13	3.6	6!
Plover								
368B Mahtomedi	4s	16	1.8	2.0	50	10	2.4	4!
Cress	3s		I				 	
			İ					
368C	j	16	1.6	1.8	45	10	2.2	40
Mahtomedi	6s							
Cress	4e							
 		14	1.4	1.6	40	9	 2.0	 3!
Mahtomedi	7s	11			_ - -		2.0	, J.
Cress	6e		İ	j		į	İ	İ
i	j			I i				
371A	4s		2.0		55	11	2.6	50
Croswell								
 		22	2.6	2.8	70	12	 3.2	 60
Cress	3s	22	2.0			12	5.2	, ot
Rosholt	2s		1				i I	i

^{*} See footnote at end of table.

							I	
Map symbol and soil name	Land capability	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	 Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
 380C	 	20	2.4	2.6	65	12	3.0	55
Cress	4e			i i				
Rosholt	3 e					į		
 		18	2.2	2.4	60	11	2.8	55
Cress	6e							
Rosholt	4e						 	
383B Mahtomedi	4s	14	1.4	1.6	40	9	2.0	35
383C Mahtomedi	6s	14	1.2	1.4	35	9	1.8	30
 383D Mahtomedi	7s		1.0		30	 8 	 1.6 	25
396B			1.4	1.6	40	9	2.0	35
Friendship	4s		İ	i i		İ		
Wurtsmith	4s		İ	i i		İ		
Grayling	4s			į į		į		
397A Perchlake	4w	18	2.0	2.2	55	11	 2.6 	50
399B	4s		1.2	1.4	35	9	 1.8 	30
399C	6s		1.0	1.2	30	8	1.6	25
399D Grayling	7s		0.8	1.0	25	7	 1.4 	20
405A								
Lupton	7w			i i				
Cathro	7w			i i				
Tawas	7w			į į				
406A Loxley	7w							
407A								
Seelyeville	7w							
Markey	7w		1	1		1		

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

* See footnote at end of table.

Table 7Land	Capability	and	Yields	per	Acre	οf	Crops	and	PastureContinued
-------------	------------	-----	--------	-----	------	----	-------	-----	------------------

Map symbol and soil name	Land capability	Soybeans	Timothy-red	Bromegrass-	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
Seelyeville	7w		i	i i		İ	<u> </u>	İ
Cathro	7w		İ	į į		į		
 412A								
Rifle	7w		i	i i		j	İ	İ
Tacoosh	7w		İ	į į		į		
 415A	7w							
Greenwood	İ		İ			į		
 439B		16	1.8	2.0	50	10	2.4	 45
Graycalm	4s			į į				
Menahga	4s			ļ				
 439C		14	1.6	1.8	45	10	2.2	 3!
Graycalm	6s		İ	į į				
Menahga	6s					į		
 439D			1.4	1.6	40	9	2.0	 3!
Graycalm	7s							
Menahga	7s					į		
441C		30	3.4	3.6	90	14	4.0	 70
Freeon	6s							
Cathro	7w							
142C		26	3.0	3.2	80	13	3.6	 65
Haugen	6s							
Greenwood	7w						 	
143D		24	2.8	3.0	75	13	3.4	 60
Amery	7s							
Greenwood	7w						 	
461A	7w							
Bowstring								
84A								
Greenwood	7w							
Beseman	7w							
195B		18	2.0	2.2	55	11	2.6	 50
Karlsborg	3s							
Grettum	4s							
Perida	4s							

^{*} See footnote at end of table.

Soybeans | Timothy-red | Bromegrass-Map symbol Land |Corn silage | Kentucky Corn Oats and soil name capability clover hay |alfalfa hay bluegrass AUM* Bu Tons Tons Bu Tons Bu 495C-----16 1.8 2.0 50 10 2.4 45 Karlsborg-----4sGrettum-----6s Perida-----6s 495D-----16 1.8 1.8 45 10 2.4 40 Karlsborg-----6s Grettum-----7 s Perida-----7 s 497A-----20 2.4 2.6 65 12 3.0 55 4w Meenon 515A-----75 3s 24 2.8 ---13 3.4 60 Manitowish 521A-----Dody 524E--------------------------Rock outcrop-----8s Frogcreek-----6s Metonga-----7 s 542B-----28 3.2 3.4 85 14 3.8 65 Haugen, very stony-----4sHaugen-----2e 542C-----26 3.0 3.2 80 13 3.6 65 Haugen, very stony-----6s Haugen-----3e 543B-----70 2e 32 3.6 3.8 95 15 4.2 Anigon 543C2-----30 3е 3.4 3.6 90 14 4.0 70 Anigon 544F--------Menahga-----7 s Mahtomedi-----7s 555A-----6w ---------------------Fordum

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

* See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Soybeans	Timothy-red	Bromegrass- alfalfa hay	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
74B Sayner	4s		1.6	 	45	10	 2.2 	 40
74C Sayner	6s		1.2	1.4	35	9	1.8	 30
74E Sayner	7s 		1.0	1.2	30	8	1.6	 25
79B Parkfalls	4s	24	2.8	3.0	75	13	3.4	 60
Haplosaprists Psammaquents	6w 6w						[
15B Cress	3s 	18	2.2	2.4	60	11	2.8	55
15C Cress	4e	18	2.0	2.2	55	11	2.6	 50
15D Cress	6e	16	1.8	2.0	50	10	 2.4 	 45
23A Capitola	7w			 			 	
24A Ossmer	2w	28	3.2	3.4	85	14	 3.8 	 65
332A Aftad	1	34	3.8	4.0	100	15	 4.4 	 75
32B Aftad	2e 	32	3.6	3.8	95	15	 4.2 	 70
32C Aftad	3e 	30	3.4	3.6	90	14	 4.0 	 70
 33F								
Pence	7e		!	ļ į		ļ	ļ	ļ
Padus	7e						 	
 	2e	28	3.2	3.4	85	14	3.8	 65

^{*} See footnote at end of table.

Map symbol and soil name	Land capability	Soybeans	Timothy-red clover hay	 Bromegrass- alfalfa hay	 Corn 	 Corn silage 	 Kentucky bluegrass	 Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
670C	 	20	2.4		 65	12	 3.0	 55
Keweenaw				l I	1		1	33
Pence	4e							
670E	 				 	 	 	
Keweenaw	7e		İ	Ì	İ	İ	İ	İ
Pence	7e			į	ĺ	İ		
671B		20	2.2	2.4	 65	12	3.0	 55
Spoonerhill, stony	3s		İ	Ì	ĺ	İ	ĺ	ĺ
Spoonerhill	3 ສ					į		
680B	 	28	3.2		 85	14	 3.8	 65
Stanberry, stony	4s			İ	ĺ	İ	ĺ	
Pence, stony	4s							
683A	2s	28	3.2		85	14	3.8	 65
Tipler	 			1	 	 	 	
706A					i	i	i	
Winterfield								
Totagatic	7w				 	[[
724A								
Rib								
Rock outcrop	8s				 	[[
726B Sissabagama	4s	18	2.2	2.4	 60 	 11 	2.8	 55
733A Wozny	6w				 		 	
771A Lenroot	 4s 	16	1.8	2.0	 50 	10	 2.4 	 45
827AScoba	 2s 	28	3.2	3.4	 85 	 14 	 3.8 	 65
853C	 	26	3.0		80	13	 3.6	 65
Frogcreek				i	İ	İ		İ
Stinnett	4s		İ	į	İ	İ	İ	İ
Wozny	6w		į	į		İ		
856BStinnett	 4s 	28	3.2		 85 	 14 	 3.8 	 65
	1		I	1	I	1	I	I

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

* See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Soybeans	Timothy-red clover hay	Bromegrass-	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
57B Frogcreek	4s	30	3.4		90	14	4.0	 70
P57C Frogcreek	6s	28	3.2		85	14	3.8	 6!
73B Stanberry	4s	30	3.4		90	14	 4.0 	 70
73C Stanberry	6s	28	3.2		85	14	3.8	 6!
773D Stanberry	7s		2.6	2.8	70	12	3.4	 60
05A Cublake	4s		2.0	2.2	55	11	2.6	 50
26A Flink	4w		2.2	2.4	60	11	2.8	 5!
943DStanberryGreenwood	6s 7w			 			 	
048A Billyboy	2s		3.2	3.4	85	14	3.8	 6!
Proce	4e 4e 7w		1.8	2.0 	50	10	2.4 	 4!
770E	7e 7e 7w						 	
070C Fremstadt Cress	4e 4e	18	2.0		55	 11 	 2.6 	 5:
070D Fremstadt	6e 6e	16	1.8	2.0	50	10	2.4	 4!

^{*} See footnote at end of table.

Soybeans | Timothy-red | Bromegrass-Map symbol Land Corn silage Kentucky Oats Corn clover hay |alfalfa hay and soil name capability bluegrass Tons AUM* Bu Tons Bu Tons Bu 1080B-----18 2.2 2.4 60 11 2.8 55 Spoonerhill-----3s Spoonerhill, stony-----3s Cress-----3s 1653C-----24 2.8 ---75 13 3.4 60 Stanberry-----6s Parkfalls-----4s Wozny-----6w 2015-----88 ---------------------Pits 2050. Landfill 3011A-----6w Barronett 3125A-----4w 18 2.0 ---55 11 2.6 50 Meehan 3126A-----16 1.8 50 10 2.4 45 4s 2.0 Wurtsmith 3276A-----1.8 50 10 2.4 45 4w Au Gres 3312B-----26 3.0 3.2 80 13 3.6 65 Glendenning, very stony 4s Glendenning-----2w 3336A-----6w ---------------------Fenander 3403A--------------Loxley-----7w Beseman-----7w Dawson-----7w 3424C-----Frogcreek-----6s Magroc-----4s Stinnett-----4s Rock outcrop-----8s

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

* See footnote at end of table.

Table 7.--Land Capability and Yields per Acre of Crops and Pasture--Continued

Map symbol and soil name	Land capability	Soybeans		Bromegrass- alfalfa hay	Corn	Corn silage	Kentucky bluegrass	Oats
		Bu	Tons	Tons	Bu	Tons	AUM*	Bu
446A Newson	6w 			 				
448B Grettum	4s	16	1.6	1.8	45	10	2.2	40
448C Grettum	6s 	14	1.4	1.6	40	9	2.0	35
	3s 	20	2.4	2.6	65	12	3.0	55
629B Perida	4s	16	1.8	2.0	50	10	2.4	45
I-W. Miscellaneous water	 		 					
. 	 						 	

^{*} Animal unit month: The amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

212 Soil Survey of

Table 8.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland. If a soil is prime farmland only under certain conditions, the conditions are specified in parentheses after the soil name)

Map symbol	Soil name
22A	Comstock silt loam, 0 to 3 percent slopes
24A	Poskin silt loam, 0 to 3 percent slopes
27A	Scott Lake sandy loam, 0 to 3 percent slopes
28B	Haugen-Rosholt complex, 2 to 6 percent slopes, very stony
38A	Rosholt sandy loam, 0 to 2 percent slopes
38B	Rosholt sandy loam, 2 to 6 percent slopes
43B	Antigo silt loam, 1 to 6 percent slopes
48A	Brill silt loam, 0 to 3 percent slopes
63A	Crystal Lake silt loam, 0 to 2 percent slopes
63B	Crystal Lake silt loam, 2 to 6 percent slopes
156B	Magnor, very stony-Magnor complex, 0 to 4 percent slopes
157B	Freeon, very stony-Freeon complex, 2 to 6 percent slopes
160A	Oesterle sandy loam, 0 to 2 percent slopes
182B	Padus sandy loam, 0 to 6 percent slopes
192A	Worcester sandy loam, 0 to 3 percent slopes
193A	Minocqua muck, 0 to 2 percent slopes
315A	Rib silt loam, 0 to 2 percent slopes
337A	Plover fine sandy loam, 0 to 3 percent slopes
542B	Haugen, very stony-Haugen complex, 2 to 6 percent slopes
543B	Anigon silt loam, 2 to 6 percent slopes
579B	Parkfalls sandy loam, 0 to 4 percent slopes, very stony
623A	Capitola muck, 0 to 2 percent slopes, very stony
624A	Ossmer silt loam, 0 to 3 percent slopes
632A	Aftad fine sandy loam, 0 to 2 percent slopes
632B	Aftad fine sandy loam, 2 to 6 percent slopes
648B	Sconsin silt loam, 1 to 6 percent slopes
683A	Tipler sandy loam, 0 to 3 percent slopes
733A	Wozny muck, 0 to 2 percent slopes, very stony
827A	Scoba sandy loam, 0 to 3 percent slopes
856B	Stinnett silt loam, 0 to 4 percent slopes, very stony
857B	Frogcreek silt loam, 2 to 6 percent slopes, very stony
873B	Stanberry sandy loam, 1 to 6 percent slopes, very stony
948A	Billyboy silt loam, 0 to 3 percent slopes
3011A	Barronett silt loam, 0 to 2 percent slopes
3312B 3336A	Glendenning, very stony-Glendenning complex, 0 to 4 percent slopes Fenander fine sandy loam, 0 to 2 percent slopes

Table 9.--Windbreaks and Environmental Plantings

(Absence of an entry indicates that trees generally do not grow to the given height)

Map symbol	 	Trees having predict	ted 20-year average h	eight, in feet, of	
and soil name	<8	8-15	16-25	26-35	>35
3A. Totagatic-Bowstring- Ausable	 	 	 		
22A: Comstock	 	 American cranberrybush, common lilac, silky	 White spruce 	red maple, red pine, silver maple,	
	 	dogwood, nannyberry, northern white- cedar, redosier dogwood	 	white ash	
24A:	İ			j i	
Poskin	 	American cranberrybush, common lilac, silky dogwood, common ninebark, nannyberry, northern white-cedar, redosier dogwood	White spruce - - - -	Eastern white pine, red maple, silver maple, white ash	
27A:				 	
Scott Lake	Siberian peashrub, gray dogwood 	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine 	
28B:	 			 	
Haugen, very stony	 	American cranberrybush, Siberian peashrub, common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, eastern redcedar, white spruce 	Eastern white pine, green ash, jack pine 	
Haugen	 	American cranberrybush, Siberian peashrub, common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, eastern redcedar, white spruce	Eastern white pine, green ash, jack pine	

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	İ		ted 20-year average h		
and soil name	<8	8-15	16-25	26-35	>35
8B: Rosholt, very stony	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
8C:	 	 	 		
Haugen, very stony	Gray dogwood 	!	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce		
Haugen		American cranberrybush, Siberian peashrub, common lilac, Amur maple, eastern arborvitae	 Manchurian crabapple, eastern redcedar, white spruce 	Eastern white pine, green ash, jack pine	
Rosholt, very stony	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,	
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,	
3B: Chetek	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol					
and soil name	<8	8-15	16-25	26-35	>35
3C: Chetek	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
BA: Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
8B: Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
8C: Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
8D: Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 	
2D: Amery	 Gray dogwood 	 American cranberrybush, Amur maple, common lilac 	:	 Eastern white pine, red maple, red pine, white ash	

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	<u> </u>							
and soil name	<8	8-15	16-25	26-35	>35			
В:								
 ntigo	Manvflower	American	Norway spruce	 Eastern white pine,				
3	cotoneaster	cranberrybush, Amur		jack pine, red pine				
	İ	maple, common		İ				
		lilac, Siberian						
	!	peashrub, gray	ļ					
		dogwood, northern						
	l I	white-cedar, silky dogwood	l I	 				
		dogwood						
C:	İ	İ	İ	į į				
ntigo	-	American	Norway spruce					
	cotoneaster	cranberrybush, Amur maple, common	 	jack pine, red pine				
	 	lilac, Siberian	 					
		peashrub, gray						
	İ	dogwood, northern	İ	į į				
		white-cedar, silky						
		dogwood						
D:								
ntigo	Manyflower	American	Norway spruce	Eastern white pine,				
	cotoneaster	cranberrybush, Amur		jack pine, red pine				
		maple, common						
		lilac, Siberian						
	 	peashrub, gray dogwood, northern	 	 				
	 	white-cedar, silky	 					
		dogwood						
A:								
a: rill	 Siberian peashrub,	American	 Eastern redcedar,	 Eastern white pine,				
	gray dogwood,	cranberrybush, Amur	Norway spruce	jack pine, red pine				
	manyflower	maple, common lilac						
	cotoneaster, silky	!	!					
	dogwood							
A:								
rystal Lake		American	Black Hills spruce,	Eastern white pine,				
		cranberrybush, Amur		red maple, red				
		maple, common	white spruce	pine, white ash				
		lilac, gray						
		dogwood, northern white-cedar	 					
	!	wiii ce-ceuai	1					

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol				neight, in feet, of	
and soil name	<8	8-15	16-25	26-35	>35
3B:	 	 	 		
Crystal Lake	 	American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce 	Eastern white pine, red maple, red pine, white ash	
3C: Crystal Lake	 	American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	 Black Hills spruce, Norway spruce, white spruce 	 Eastern white pine, red maple, red pine, white ash 	
3E: Crystal Lake	 	Amur maple, common lilac, gray dogwood, northern white-cedar	 Black Hills spruce, Norway spruce, white spruce	 Eastern white pine, red maple, red pine, white ash	
4A. Totagatic-Winterfield	 	 	 		
9B: Keweenaw.		 	 		
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		Eastern white pine,	
Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine, jack pine, red pine	
9C: Keweenaw.	 	 	 		

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15	16-25	26-35	>35	
•						
9C: Sayner	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,		
ilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		Eastern white pine, jack pine, red pine		
E: Zeweenaw.	 	 	 			
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	Eastern white pine, jack pine, red pine 		
Vilas	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,		
lB: /ilas	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 		
4C: Vilas	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine		
4D: Vilas	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac		 Eastern white pine, jack pine, red pine		

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
00B: Menahga	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	 Eastern white pine, jack pine, red pine 			
00C:	 	 	 	 			
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		Eastern white pine, jack pine, red pine			
00D:	 						
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac	Eastern redcedar, Norway spruce	Eastern white pine, jack pine, red pine			
27D:	 	 		 			
Amery	Gray dogwood 	'	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash			
Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	 Eastern white pine, jack pine, red pine 			
27E:							
Amery	Gray dogwood -	'	Black Hills spruce,	Eastern white pine, red maple, red pine, white ash			
Rosholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	Eastern redcedar, Norway spruce	Eastern white pine,			
56B: Magnor, very stony.	 	 	 				

		Trees having predic	ted 20-year average h	eight, in feet, of	
Map symbol and soil name		8-15	16-25	26-35	>35
	İ	<u> </u>	İ		
156B: Magnor	 	 American	 White spruce	 Eastern white pine,	
	 	cranberrybush, common lilac, nannyberry, northern white- cedar, redosier dogwood, silky dogwood	 	red maple, red pine, silver maple, white ash	
57B:	İ	İ	İ	İ	
Freeon, very stony.					
Freeon	 	American cranberrybush, Amur maple, common lilac, northern white-cedar	 Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	
.57C:		 	 		
Freeon, very stony.					
Freeon	 	American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	 Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	
.60A:		 	 		
Oesterle	Nannyberry, redosier dogwood 	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce 	Eastern white pine, red maple, red pine, silver maple, white ash	
182B:	[l I	 	 	
Padus	 Manyflower cotoneaster 	 American cranberrybush, Amur maple, common lilac, Siberian	 Norway spruce 	 Eastern white pine, jack pine, red pine 	
	 	peashrub, gray dogwood, northern white-cedar, silky	 	 	

dogwood

Table 9.--Windbreaks and Environmental Plantings--Continued

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of							
and soil name	<8	8-15	16-25	26-35	>35			
182C: Padus	 Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	 Norway spruce 	Eastern white pine,				
192A: Worcester	 	American cranberrybush, common lilac, silky dogwood, common ninebark, nannyberry, northern white- cedar, redosier dogwood	 White spruce 	Eastern white pine, red maple, silver maple, white ash				
193A. Minocqua	 	 	 	 				
215B: Pence	 Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	 Norway spruce 	Eastern white pine,				
215C: Pence	 Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	 Norway spruce 	Eastern white pine,				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	İ						
and soil name	<8	8-15	16-25	26-35	>35		
L5D:	 	 	 	 			
Pence	Manyflower	American	Norway spruce	Eastern white pine.			
	cotoneaster	cranberrybush, Amur		jack pine, red pine			
		maple, common	İ				
		lilac, Siberian	I I				
		peashrub, gray	I 				
		dogwood, northern	I 				
	i	white-cedar, silky	İ	i i			
	İ	dogwood					
5A.]	 	 				
ib		 	 				
15] 	 	 	 			
7A:	į	<u>.</u>					
lover		American	White spruce				
		cranberrybush,		red maple, red			
	1	common lilac,	1	pine, silver maple, white ash			
		nannyberry, northern white-	 	white ash			
		cedar, redosier	 				
		dogwood, silky	 				
	 	dogwood	 	 			
	į	į	į	į			
8B:	[]	 	 	 			
ahtomedi	Siberian peashrub,	American	Eastern redcedar,	Eastern white pine,			
	gray dogwood,	cranberrybush, Amur		jack pine, red pine			
	manyflower	maple, common lilac	 				
	cotoneaster, silky	1	1				
	dogwood 	 	 	 			
ress	Siberian peashrub,	Manchurian	Russian olive, green	,			
	common lilac		ash, jack pine, red	eastern white pine			
	ļ.	crabapple, eastern	pine				
	 	redcedar	 				
BC:							
htomedi	Siberian peashrub,	American	Eastern redcedar,	Eastern white pine,			
	gray dogwood,	cranberrybush, Amur	Norway spruce	jack pine, red pine			
	manyflower	maple, common lilac		į			
	cotoneaster, silky			į			
	dogwood	l I	l I				
ress		 Manchurian	 Russian olive, green	Siberian elm,			
	common lilac	crabapple, Siberian	ash, jack pine, red	eastern white pine			
		crabapple, eastern	pine	į į			
		redcedar	I	ı i			

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of				
and soil name	<8	8-15	16-25	26-35	>35
68D:	 		 		
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		Eastern white pine, jack pine, red pine 	
ress	Siberian peashrub,	 Manchurian crabapple, Siberian crabapple, eastern redcedar	Russian olive, green ash, jack pine, red pine	'	
1A:					
roswell	Siberian peashrub, manyflower cotoneaster	Amur maple, common lilac 	Eastern redcedar, jack pine, red pine 	Eastern white pine - 	
30B:					
ress	Siberian peashrub, common lilac 	!	Russian olive, green ash, jack pine, red pine	'	
osholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,	
OC:					
ress	Siberian peashrub, common lilac 	•	Russian olive, green ash, jack pine, red pine 		
osholt	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		Eastern white pine,	
0D: ress	 Siberian peashrub, common lilac	 Manchurian crabapple, Siberian crabapple, eastern redcedar	 Russian olive, green ash, jack pine, red pine		

Trees having predicted 20-year average height, in feet, of

Table 9.--Windbreaks and Environmental Plantings--Continued

	Trees having predicted 20-year average height, in feet, of						
Map symbol		1					
and soil name	<8	8-15	16-25	26-35	>35		
80D: Rosholt	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		 Eastern white pine, jack pine, red pine 			
83B:							
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		Eastern white pine, jack pine, red pine			
83C:	 	 	 	 			
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 	Eastern redcedar, Norway spruce 	Eastern white pine, jack pine, red pine			
83D:	 	 	 	 			
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 	Eastern redcedar, Norway spruce 	Eastern white pine, jack pine, red pine			
96B: Friendship.	 	 	 				
Wurtsmith	 Siberian peashrub, manyflower cotoneaster	 Amur maple, common lilac 	 Eastern redcedar, jack pine, red pine 	 Eastern white pine 			
Grayling	Peking cotoneaster, Siberian peashrub, barberry, common lilac, silver	 Eastern redcedar 	 Jack pine, red pine, eastern white pine 	 			

buffaloberry, smooth sumac, staghorn sumac

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of							
and soil name	<8	8-15	16-25	26-35	>35			
7A:								
Perchlake	 - Nannyberry, redosier	American	 Eastern arborvitae,	 Eastern white pine,				
erchiake	dogwood	cranberrybush,	white spruce	red maple, red				
	dogwood	common lilac, silky	white spidee	pine, silver maple,				
		dogwood	 	white ash				
9B:	İ	j		į į				
rayling	, -	Eastern redcedar						
	Siberian peashrub,		eastern white pine					
	barberry, common							
	lilac, silver							
	buffaloberry,							
	smooth sumac,							
	staghorn sumac	 	 					
99C:			 					
Grayling	- Peking cotoneaster,	Eastern redcedar	Jack pine, red pine,	i i				
-	Siberian peashrub,	İ	eastern white pine	į i				
	barberry, common	İ	İ	į i				
	lilac, silver			İ				
	buffaloberry,							
	smooth sumac,							
	staghorn sumac							
99D:		 	 					
Grayling	- Peking cotoneaster.	Eastern redcedar	 Jack pine. red pine.	i i				
	Siberian peashrub,		eastern white pine	i				
	barberry, common	I		i i				
	lilac, silver	i I	 	i				
	buffaloberry,	i		i i				
	smooth sumac,	İ		i i				
	staghorn sumac	j		j i				
)5A.		 	 					
Lupton, Cathro, and Tawas		 	 					
Idwas			 					
06A.								
Coxley	j	İ	İ	į i				
				İ				
7A.				İ				
Seelyeville and Markey				İ				
.OA.								
eelyeville and Cathro								

	Trees having predicted 20-year average height, in feet, of						
Map symbol and soil name	 	8-15	16-25	26-35	>35		
and boll name		l	10 25	1 20 33			
112A.							
Rifle and Tacoosh		İ		į			
115A.							
Greenwood	 	 		 			
39B:	 	 					
Graycalm	Siberian peashrub	Amur maple, common	Eastern redcedar,	Eastern white pine			
-	_	lilac	jack pine, red pine	į į			
Menahga	-	American	Eastern redcedar,	Eastern white pine,			
	gray dogwood,	cranberrybush, Amur maple, common lilac	Norway spruce	jack pine, red pine	 		
	manyflower cotoneaster, silky	mapie, common lilac	 	 			
	dogwood						
39C:							
Graycalm	Siberian peashrub	· -	Eastern redcedar,	Eastern white pine			
	 	lilac	jack pine, red pine				
Menahga	 Siberian peashrub.	 American	 Eastern redcedar,	 Eastern white pine,			
Monanga	gray dogwood,	cranberrybush, Amur	'	jack pine, red pine			
	manyflower	maple, common lilac					
	cotoneaster, silky						
	dogwood						
39D:	 	 	l I				
Graycalm	 Siberian peashrub	 Amur maple, common	 Eastern redcedar.	 Eastern white pine			
		lilac	jack pine, red pine				
		İ		j i			
Menahga	<u>-</u>	American	Eastern redcedar,	Eastern white pine,			
	gray dogwood,	cranberrybush, Amur	Norway spruce	jack pine, red pine			
	manyflower cotoneaster, silky	maple, common lilac	 				
	dogwood	 	 	 			
41C.				İ			
Freeon-Cathro				<u> </u>			
42C: Haugen	Gray dogwood	Amoriaan	 Eastern arborvitae,	 Pagtorn white nine			
naugen	Gray dogwood	•	Black Hills spruce,				
		maple, common lilac	-	pine, white ash			
		- 	white spruce	j			
		[
Greenwood.							

Table 9.--Windbreaks and Environmental Plantings--Continued

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
143D: Amery	 Gray dogwood 	!	Black Hills spruce,	Eastern white pine, red maple, red pine, white ash			
Greenwood.			 				
161A. Bowstring	 	 	 	 			
84A. Greenwood and Beseman							
195B: Karlsborg	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	!	 Eastern redcedar, Norway spruce, jack pine 	 Eastern white pine, red pine 			
Grettum	 Siberian peashrub 	 Amur maple, common lilac	 Eastern redcedar, jack pine, red pine	 Eastern white pine 			
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	American cranberrybush, Amur maple, common lilac		Eastern white pine,			
195C: Karlsborg	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce, jack pine 	 Eastern white pine, red pine 			
Grettum	 Siberian peashrub 	 Amur maple, common lilac	 Eastern redcedar, jack pine, red pine	 Eastern white pine 			
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	 cranberrybush, Amur maple, common lilac		Eastern white pine,			

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
95D: Karlsborg	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	'	 Eastern redcedar, Norway spruce, jack pine 	 Eastern white pine, red pine 			
Frettum	 Siberian peashrub 	 Amur maple, common lilac	 Eastern redcedar, jack pine, red pine	 Eastern white pine 			
Perida	Siberian peashrub, cotoneaster, gray dogwood, silky dogwood	 American cranberrybush, Amur maple, common lilac		Eastern white pine,			
97A:							
Meenon	Nannyberry, redosier dogwood 	American cranberrybush, common lilac, silky dogwood	Eastern arborvitae, white spruce 	Eastern white pine, red maple, red pine, silver maple, white ash			
15A:		 	 				
Manitowish	Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce - - -	Eastern white pine, jack pine, red pine			
21A. Dody	 	 	 				
24E: Rock outcrop.	 	 	 	 			
Frogcreek.		 	 				
Metonga	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Norway spruce 	 Eastern white pine, jack pine, red pine 			

Table 9.--Windbreaks and Environmental Plantings--Continued

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
	!		[[[
542B: Haugen, very stony	 Gray dogwood 	 American cranberrybush, Amur maple, common lilac 	 Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce				
Haugen	 Gray dogwood 	 American cranberrybush, Amur maple, common lilac 	 Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash			
542C:							
Haugen, very stony	Gray dogwood 	American cranberrybush, Amur maple, common lilac 	Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash			
Haugen	 Gray dogwood 	 American cranberrybush, Amur maple, common lilac	Black Hills spruce,	Eastern white pine, red maple, red pine, white ash			
543B, 543C2. Anigon	 	 	 	 			
544F:	 		 	 			
Menahga	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		Eastern white pine, jack pine, red pine 			
Mahtomedi	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		 Eastern white pine, jack pine, red pine 			
555A. Fordum	 	 - -	 -	 			
574B: Sayner	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 		 Eastern white pine, jack pine, red pine 			

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol						
and soil name	<8	8-15	16-25	26-35	>35	
				!		
74C:				<u> </u>		
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		Eastern white pine, jack pine, red pine		
74E:		 				
Sayner	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac 		Eastern white pine, jack pine, red pine		
79B.	[
Parkfalls	 	 		i i		
00A. Haplosaprists and						
Psammaquents						
15B:		 		 		
Cress	Siberian peashrub,	Manchurian	Russian olive, green	Siberian elm,		
	common lilac 	crabapple, Siberian crabapple, eastern redcedar	ash, jack pine, red pine 	eastern white pine 		
15C:		 		 		
Cress	Siberian peashrub,	Manchurian	Russian olive, green	Siberian elm,		
	common lilac	crabapple, Siberian crabapple, eastern redcedar	ash, jack pine, red pine 	eastern white pine		
15D:				 		
Cress	Siberian peashrub,	Manchurian	Russian olive, green	· ·		
	common lilac	crabapple, Siberian crabapple, eastern redcedar	ash, jack pine, red pine	eastern white pine		
23A.	 	 	 	 		

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol			ted 20-year average h		
and soil name	<8	8-15	16-25	26-35	>35
24A: Ossmer	 	American	 White spruce	 	
		cranberrybush, common lilac, silky dogwood, nannyberry, northern white- cedar, redosier dogwood	į	red maple, red pine, silver maple, white ash	
32A:			İ	j i	
Aftad	Gray dogwood - 		Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce		
532B:					
Aftad	 	American cranberrybush, Amur maple, common lilac, gray dogwood, northern white-cedar	Black Hills spruce, Norway spruce, white spruce	Eastern white pine, red maple, red pine, white ash	
332C:			[[[
Aftad	Gray dogwood - -		Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce		
33F:					
Pence	Manyflower cotoneaster	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce - - -	Eastern white pine, jack pine, red pine	

	Trees having predicted 20-year average height, in feet, of						
Map symbol				·			
and soil name	<8	8-15	16-25	26-35	>35		
33F:							
33F: Padus	Wanteflower	American	Nominar annua	 - Eastern white pine,			
radus	cotoneaster	cranberrybush, Amur		jack pine, red pine			
	Coconeascer	maple, common		Jack pine, led pine			
		lilac, Siberian		i			
	<u> </u>	peashrub, gray	<u> </u>	i i			
	İ	dogwood, northern	İ	i i			
		white-cedar, silky					
	ļ	dogwood		į į			
18B:							
нов: Sconsin	Manuflower	American	Norway spruce	 - Eastern white pine,			
SCOMBIN	cotoneaster	cranberrybush, Amur		jack pine, red pine			
		maple, common					
		lilac, Siberian		i i			
		peashrub, gray		İ			
		dogwood, northern					
		white-cedar, silky		į į			
		dogwood		!			
70C:	 		 				
Keweenaw.							
	İ	i		i i			
Pence	Manyflower	American	Norway spruce	Eastern white pine,			
	cotoneaster	cranberrybush, Amur	•	jack pine, red pine			
		maple, common					
		lilac, Siberian		!			
		peashrub, gray					
		dogwood, northern white-cedar, silky					
		dogwood					
	İ						
70E:	İ	İ	İ	į į			
Keweenaw.							
Pence	Manuflower	American	 Norway spruce	 - Eastern white pine,			
	cotoneaster	cranberrybush, Amur		jack pine, red pine			
		maple, common		Justi pino, isa pino			
		lilac, Siberian		i			
	i	peashrub, gray	İ	į į			
	İ	dogwood, northern	İ	i i			
		white-cedar, silky		i i			
	!	dogwood	!	<u> </u>			
71B.							
poonerhill, stony-	I I		I I				
	I I		1				

Spoonerhill

 ${\tt Table 9.--Windbreaks \ and \ Environmental \ Plantings--Continued}$

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15	16-25	26-35	>35		
680B: Stanberry, stony.	 	 	 	 			
Pence, stony	 Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	 Norway spruce 	Eastern white pine, jack pine, red pine			
583A:	İ	İ		j j			
Tipler	Manyflower cotoneaster 	American cranberrybush, Amur maple, common lilac, Siberian peashrub, gray dogwood, northern white-cedar, silky dogwood	Norway spruce 	Eastern white pine, jack pine, red pine			
706A. Winterfield-Totagatic		 					
724A. Rib-Rock outcrop	 	 	 				
726B: Sissabagama	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	 Eastern white pine, jack pine, red pine 			
733A. Wozny	 	 	 				
771A: Lenroot	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	 Eastern white pine, jack pine, red pine 			

Table 9.--Windbreaks and Environmental Plantings--Continued

	Trees having predicted 20-year average height, in feet, of						
Map symbol and soil name		8-15	16-25	26-35	>35		
and soil name	< 8	8-12	16-25	26-35	>35		
827A:	 	 	 	 			
Scoba		 American	 Eastern redcedar,	 Eastern white pine,			
beeba	gray dogwood,	cranberrybush, Amur	•	jack pine, red pine			
	manyflower	maple, common lilac					
	cotoneaster	_	İ	j j			
	!		[
353C:							
Frogcreek	Gray dogwood	'	Eastern arborvitae,	Eastern white pine,			
		-	Black Hills spruce,				
	1	maple, common lilac		pine, white ash			
	 	 	white spruce				
Stinnett	 Nannyberry, redosier	American	Eastern arborvitae,	 Eastern white pine,			
	dogwood	cranberrybush,	white spruce	red maple, red			
	į	common lilac, silky	İ	pine, silver maple,			
		dogwood	İ	white ash			
Wozny.	 	 	 -				
56B:			 	 			
Stinnett	Nannyberry, redosier	American	Eastern arborvitae,	Eastern white pine,			
	dogwood	cranberrybush,	white spruce	red maple, red			
		common lilac, silky		pine, silver maple,			
	!	dogwood		white ash			
57B:		l I	 				
Frogcreek	Gray dogwood	 American	 Eastern arborvitae,	 Eastern white pine,			
		'	Black Hills spruce,				
	I	maple, common lilac		pine, white ash			
	İ		white spruce				
	İ		į	j j			
57C:	[[[
rogcreek	Gray dogwood	'	Eastern arborvitae,	Eastern white pine,			
		-	Black Hills spruce,				
		maple, common lilac		pine, white ash			
	 	 	white spruce				
73B, 873C, 873D.		 	 				
tanberry							
-	İ		İ	į			
	•		· ·				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
905A: Cublake	Peking cotoneaster, Siberian peashrub, buffaloberry, common lilac, smooth sumac, staghorn sumac	 Eastern redcedar 	Austrian pine, jack pine, red pine, eastern white pine	 Manchurian crabapple 			
926A:	 		 				
Flink	Sargent crabapple, silky dogwood	American cranberrybush, common lilac, nannyberry	 Eastern arborvitae, white spruce 	Manchurian crabapple, red pine, eastern white pine, green ash			
943D. Stanberry-Greenwood							
948A:	 		 	 			
Billyboy	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		Eastern white pine, jack pine, red pine 			
970C:	 	 	 				
Keweenaw.				i			
Pence	Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	American cranberrybush, Amur maple, common lilac		 Eastern white pine, jack pine, red pine 			
Greenwood.	 	 	 				
970E:	 		 				
Keweenaw.	!	!	!	ļ į			
Pence	 Siberian peashrub, gray dogwood, manyflower cotoneaster, silky dogwood	 American cranberrybush, Amur maple, common lilac 	 Eastern redcedar, Norway spruce 	 Eastern white pine, jack pine, red pine 			

Table 9.--Windbreaks and Environmental Plantings--Continued

Trees having predicted 20-year average height. i

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
L070C: Fremstadt	 Peking cotoneaster, Siberian peashrub 	 Common lilac, Amur maple, eastern arborvitae	 Manchurian crabapple, white spruce, Norway spruce	 Eastern white pine, jack pine, red pine 	-		
Cress	 Siberian peashrub, common lilac 	 Manchurian crabapple, Siberian crabapple, eastern redcedar	 Russian olive, green	 Siberian elm, eastern white pine 			
L070D:		 	 				
Fremstadt	Peking cotoneaster, Siberian peashrub	Common lilac, Amur maple, eastern arborvitae	Manchurian crabapple, white spruce, Norway spruce	Eastern white pine, jack pine, red pine	-		
Cress	 Siberian peashrub, common lilac 	 Manchurian crabapple, Siberian crabapple, eastern redcedar	 Russian olive, green ash, jack pine, red pine 				
L080B:							
Spoonerhill.		į					
Spoonerhill, stony.							
Cress	 Siberian peashrub, common lilac	·	 Russian olive, green ash, jack pine, red pine 				
l653C. Stanberry-Parkfalls- Wozny	 	 	 				
2015. Pits		 	 				
2050. Landfill	 	 	 				
3011A. Barronett	 - 	 	 				

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol		Trees having predic	ted 20-year average h	eight, in feet, of	
and soil name	<8	8-15	16-25	26-35	>35
3125A: Meehan	 Nannyberry, redosier dogwood 	 American cranberrybush, common lilac, silky dogwood	 Eastern arborvitae, white spruce 	 Eastern white pine, red maple, red pine, silver maple, white ash	
3126A: Wurtsmith	 Siberian peashrub, manyflower cotoneaster	 Amur maple, common lilac 	 Eastern redcedar, jack pine, red pine 	 - Eastern white pine - 	
3276A: Au Gres	 Common ninebark 	 American cranberrybush, nannyberry 	 Amur maple, white spruce 	 Manchurian crabapple, Norway spruce, jack pine, eastern white pine, green ash	 Imperial Carolina poplar
3312B: Glendenning, very stony	 Redosier dogwood, silky dogwood 	 American cranberrybush, common lilac 	 Eastern arborvitae, white spruce 	 Norway spruce, eastern white pine, green ash, red pine, silver maple, white ash	İ
Glendenning	 Redosier dogwood, silky dogwood 	 American cranberrybush, common lilac 	 Eastern arborvitae, white spruce 	 Norway spruce, eastern white pine, green ash, red pine, silver maple, white ash	į
3336A. Fenander	 	 	 	 	
3403A. Loxley, Beseman, and Dawson					
3424C: Frogcreek	 Gray dogwood 	 American cranberrybush, Amur maple, common lilac 	 Eastern arborvitae, Black Hills spruce, Norway spruce, white spruce		

Table 9.--Windbreaks and Environmental Plantings--Continued

Map symbol	 	Trees having predic	ted 20-year average h	eight, in feet, of	Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15	16-25	26-35	>35					
24C:			 							
agroc	Nannyberry, redosier	'	Eastern arborvitae,	Eastern white pine,						
	dogwood, silky dogwood	cranberrybush,	white spruce	red maple, red						
	dogwood	COMMON IIIAC	 	pine, silver maple, white ash						
		 	 	white ash						
tinnett	Nannyberry, redosier	American	Eastern arborvitae,	Eastern white pine,						
	dogwood	cranberrybush,	white spruce	red maple, red						
		common lilac, silky		pine, silver maple,						
		dogwood	İ	white ash						
			İ	į į						
ock outcrop.										
46A.				!						
ewson		ĺ	 							
18B:		 	 							
rettum	Peking cotoneaster,	Eastern redcedar	Jack pine, red pine,							
	Siberian peashrub,		eastern white pine	i i						
	buffaloberry,	İ	į	į i						
	common lilac,	İ	İ	į i						
	silver	İ	İ	į i						
	buffaloberry,									
	smooth sumac,									
	staghorn sumac			[
18C:		l I	 							
ettum	Peking cotoneaster,	 Eastern redcedar	 Jack nine	 						
eccum	Siberian peashrub,	Lastern redeedar	eastern white pine							
	buffaloberry,	! 	cascern whree princ	i						
	common lilac,	! 	 	i						
	silver			i i						
	buffaloberry,		İ	į i						
	smooth sumac,			į						
	staghorn sumac									
L6A: Limlake		 amonicon	 Pagtown medaldan							
.IMIAR6	Siberian peashrub, gray dogwood,	American cranberrybush, Amur	Eastern redcedar,	Eastern white pine,						
	manyflower	maple, common lilac		Jack pine, red pine						
	cotoneaster, silky	maple, common lilac	I 	i						
	dogwood									
				j						
9B:	İ		İ	į						
erida	Siberian peashrub,	American	Eastern redcedar,	Eastern white pine,						
	cotoneaster, gray	cranberrybush, Amur	Norway spruce	jack pine, red pine						
	dogwood, silky	maple, common lilac	I	1						
	dogwood, silky	maple, common illac	!	!						

Table 9.--Windbreaks and Environmental Plantings--Continued

	Trees having predicted 20-year average height, in feet, of						
Map symbol		1 0.15					
and soil name	<8	8-15	16-25	26-35	>35		
-W.							
Miscellaneous water			į į	j			
.							
Vater							
		I		I			

240 Soil Survey of

Table 10.--Conservation Tree/Shrub Suitability Groups

(Absence of an entry indicates that a conservation tree/shrub suitability group is not assigned)

Map symbol and	Conservation tree/shrub
soil name	suitability group
3A: Totagatic	10
Bowstring	10
Ausable	10
22A: Comstock	10
24A: Poskin	10
27A: Scott Lake	6GA
28B: Haugen, very stony	2A
Haugen	2A
Rosholt, very stony	6GA
Rosholt	6GA
28C: Haugen, very stony	2A
Haugen	2 A
Rosholt, very stony	6GA
Rosholt	6GA
33B: Chetek	6GA
33C: Chetek	6GA
38A: Rosholt	 6GA
38B: Rosholt	6GA
38C: Rosholt	6GA
38D: Rosholt	6GA
42D: Amery	4A
43B: Antigo	6GA
43C: Antigo	6GA

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	 Conservation tree/shrub
soil name	suitability group
	<u> </u>
43D: Antigo	
48A: Brill	
63A: Crystal Lake	 2A
63B: Crystal Lake	 2A
63C: Crystal Lake	
63E: Crystal Lake	
64A: Totagatic	10
Winterfield	10
69B: Keweenaw	
Sayner	7A
Vilas	7A
69C: Keweenaw	 4A
Sayner	 7A
Vilas	 7A
69E: Keweenaw	 4A
Sayner	7A
Vilas	 7A
74B: Vilas	 7A
74C: Vilas	
74D: Vilas	
100B: Menahga	
100C: Menahga	
100D: Menahga	 7A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and soil name	tree/shrub
SOII Hame	suitability group
127D:	
Amery	4A
-	
Rosholt	6GA
127E:	4-
Amery	4A
Rosholt	 6GA
156B:	
Magnor, very stony	10
Magnor	10
157B:	
Freeon, very stony	2A
Freeon	2A
157C:	
Freeon, very stony	2A
Freeon	 2A
110001	
160A:	
Oesterle	10
182B: Padus	 6GA
Padus	OGA
182C:	
Padus	6GA
192A:	
Worcester	10
193A:	
Minocqua	10
_	
215B:	
Pence	6GA
215C:	
Pence	 6GA
	·
215D:	
Pence	6GA
2153.	
315A: Rib	 10
112	
337A:	
Plover	10
368B:	73
Mahtomedi	7A
Cress	 6GA
368C:	
Mahtomedi	7A
G	[
Cress	6 GA
	I

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and	tree/shrub
soil name	suitability group
368D:	
Mahtomedi	7A
_	
Cress	6GA
371A:	
Croswell	10
Clobwcll	1
380B:	
Cress	6GA
	i
Rosholt	6GA
380C:	
Cress	6GA
Rosholt	6GA
2000	
380D: Cress	 6GA
Cless	OGA
Rosholt	 6GA
110211020	
383B:	
Mahtomedi	7A
383C:	
Mahtomedi	7A
383D:	
Mahtomedi	7A
396B:	
Friendship	1A
	
Wurtsmith	2A
	i İ
Grayling	7A
397A:	
Perchlake	10
399B:	 7A
Grayling	/A
399C:	
Grayling	7A
79	
399D:	
Grayling	7A
405A:	
Lupton	10
Cathro	10
	10
Tawas	10
406A:	
Loxley	 10
	 1 0
	ı

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	Conservation tree/shrub
soil name	suitability group
407A: Seelyeville	10
Markey	10
410A:	10
Cathro	10
412A:	10
Tacoosh	10
415A: Greenwood	10
439B:	7A
Menahga	7A
439C: Graycalm	7A
Menahga	7A
439D:	7 A
Menahga	7A
441C:	2A
Cathro	10
442C: 	2A
Greenwood	10
443D: Amery	4A
Greenwood	10
461A: Bowstring	10
484A:	10
Beseman	10
495B: Karlsborg	2 A
Grettum	1A
Perida	1A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	 Conservation tree/shrub
soil name	suitability group
495C: Karlsborg	 2A
Grettum	 1A
Perida	1A
495D: Karlsborg	 2A
Grettum	1A
Perida	1A
497A: Meenon	 10
515A: Manitowish	 2A
521A: Dody	 10
524E: Rock outcrop.	
Frogcreek	2A
Metonga	4A
542B: Haugen, very stony	 2A
Haugen	2A
542C: Haugen, very stony	 2A
Haugen	2A
543B: Anigon	 6GA
543C2: Anigon	 6GA
544F: Menahga	7A
Mahtomedi	7A
555A: Fordum	10
574B: Sayner	7 A
574C: Sayner	7A
574E: Sayner	7A
	•

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol and	 Conservation tree/shrub
soil name	suitability group
579B: Parkfalls	
600A: Haplosaprists	 10
Psammaquents	10
615B: Cress	 6GA
615C: Cress	
615D: Cress	
623A: Capitola	10
624A: Ossmer	10
632A: Aftad	
632B: Aftad	
632C: Aftad	2A
633F: Pence	
Padus	6GA
648B: Sconsin	 2A
670C: Keweenaw	 4A
Pence	6GA
670E: Keweenaw	4A
Pence	6GA
671B: Spoonerhill, stony	2A
Spoonerhill	2 A
680B: Stanberry, stony	
Pence, stony	6GA
683A: Tipler	 2A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation
and	tree/shrub
soil name	suitability group
706A: Winterfield	10
Totagatic	10
724A: Rib	10
Rock outcrop.	
726B: Sissabagama	2A
733A: Wozny	10
771A: Lenroot	2 A
827A: Scoba	2 A
853C: Frogcreek	2A
Stinnett	10
Wozny	10
856B: Stinnett	10
857B: Frogcreek	2 A
857C: Frogcreek	2A
873B: Stanberry	2 A
873C: Stanberry	2 A
873D: Stanberry	2A
905A: Cublake	2A
926A: Flink	10
943D: Stanberry	2A
Greenwood	10
948A: Billyboy	2A

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation tree/shrub
and soil name	suitability group
970C:	
Keweenaw	4A
Pence	(3)
Pence	6 GA
Greenwood	10
970E: Keweenaw	 4A
Reweenaw	*A
Pence	6GA
Greenwood	10
1070C:	
Fremstadt	4A
Cress	6GA
1070D:	
Fremstadt	4A
Cress	6GA
1080B:	
Spoonerhill	2A
Spoonerhill, stony	2A
Cress	 6GA
1653C:	
Stanberry	2A
Parkfalls	10
Wozny	10
2015.	
Pits	
2050.	
Landfill	
3011A:	
Barronett	10
2125	
3125A: Meehan	 10
Meenan	
3126A:	
Wurtsmith	2A
3276A:	
Au Gres	10
3312B:	
Glendenning, very stony	 10
Glendenning	10

Table 10.--Conservation Tree/Shrub Suitability Groups--Continued

Map symbol	Conservation	
and	tree/shrub	
soil name	suitability group	
3336A:		
Fenander	10	
3403A:		
Loxley	10	
HOXIEY	10	
Beseman	10	
Dawson	10	
Dawson	10	
3424C:		
Frogcreek	2A	
 Magroc	10	
į		
Stinnett	10	
Rock outcrop.		
3446A:		
Newson	10	
Newson	10	
3448B:		
Grettum	1A	
3448C:		
Grettum	1A	
3516A:		
Slimlake	6GA	
3629B:		
Perida	2A	
M-W.		
Miscellaneous water		
W.		
Water		

Table 11.--Forest Land Harvest Equipment Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest land harvest equipment
and	considerations
soil name	
27.	
3A: Totagatic	Flooding
100494010	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Ausable	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
22A:	
Comstock	Wetness
	Susceptible to rutting and wheel slippage
24A:	
Poskin	Wetness
	Susceptible to rutting and wheel slippage
27A:	
Scott Lake	No major considerations
28B:	
Haugen, very stony	Wetness
Haugen	Wetness
Rosholt, very stony	No major considerations
Rosholt	No major considerations
ROBILOTO	No major constactations
28C:	
Haugen, very stony	Wetness
Haugen	Wetness
Dogholt war stone	No major gongidorations
Rosholt, very stony	No major considerations
Rosholt	No major considerations
33B:	
Chetek	Susceptible to rutting and wheel slippage
227	
33C:	Susceptible to rutting and wheel slippage
Checek	susceptible to futting and wheel slippage
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
38C:	
Rosholt	No major considerations
38D:	
Rosholt	Slope

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol and soil name	Forest land harvest equipment considerations
42D: Amery	Slope
43B: Antigo	No major considerations
43C: Antigo	No major considerations
43D: Antigo	Slope
48A: Brill	Wetness Susceptible to rutting and wheel slippage
63A: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63B: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63C: Crystal Lake	Wetness Susceptible to rutting and wheel slippage
63E: Crystal Lake	Slope Wetness Susceptible to rutting and wheel slippage
64A: Totagatic	Flooding Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
Winterfield	Flooding Wetness Poor traction (loose sandy material)
69B: Keweenaw	Poor traction (loose sandy material)
Sayner	Poor traction (loose sandy material)
Vilas	Poor traction (loose sandy material)
69C: Keweenaw	Poor traction (loose sandy material)
Sayner	Poor traction (loose sandy material)
Vilas	Poor traction (loose sandy material)
69E: Keweenaw	Slope Poor traction (loose sandy material)
Sayner	Slope Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
soli name	
69E: Vilas	Slope Poor traction (loose sandy material)
74B: Vilas	Poor traction (loose sandy material)
74C: Vilas	Poor traction (loose sandy material)
74D: Vilas	Slope Poor traction (loose sandy material)
100B: Menahga	Poor traction (loose sandy material)
100C: Menahga	Poor traction (loose sandy material)
100D: Menahga	 Slope Poor traction (loose sandy material)
127D: Amery	Slope
Rosholt	Slope
127E: Amery	Slope
Rosholt	Slope
156B: Magnor, very stony	Wetness
Magnor	Wetness
157B: Freeon, very stony	Wetness
Freeon	Wetness
157C: Freeon, very stony	Wetness
Freeon	Wetness
160A: Oesterle	Wetness
182B: Padus	No major considerations
182C: Padus	No major considerations
192A: Worcester	Wetness
193A: Minocqua	Wetness Susceptible to rutting and wheel slippage

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
215B:	
Pence	No major considerations
215C:	
Pence	No major considerations
215D:	
Pence	Slope
315A:	
Rib	Wetness
	Susceptible to rutting and wheel slippage
337A:	
Plover	Wetness
368B:	Poor traction (long gardy material)
Mantomedi	Poor traction (loose sandy material)
Cress	No major considerations
2.22	
Mahtomedi	Poor traction (loose sandy material)
Mantomeal	root craction (roote bandy material)
Cress	No major considerations
368D:	
Mahtomedi	Slope
	Poor traction (loose sandy material)
Cress	Slope
371A:	
Croswell	Poor traction (loose sandy material)
3000	
380B: Cress	No major considerations
i	
Rosholt	No major considerations
380C:	
Cress	No major considerations
Rosholt	No major considerations
380D:	
Cress	Slope
	-1
Rosholt	Slope
383B:	
Mahtomedi	Poor traction (loose sandy material)
383C:	
	Poor traction (loose sandy material)
İ	-
383D:	Clone
Mahtomedi	Slope Poor traction (loose sandy material)
i	
396B:	
Friendship	Poor traction (loose sandy material)
Wurtsmith	Poor traction (loose sandy material)
İ	· ·

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
396B:	
Grayling	Poor traction (loose sandy material)
397A:	
Perchlake	Wetness
	Poor traction (loose sandy material)
	•
399B:	
Grayling	Poor traction (loose sandy material)
-	-
399C:	
Grayling	Poor traction (loose sandy material)
399D:	
Grayling	Slope
	Poor traction (loose sandy material)
405A:	
Lupton	Wetness
	Susceptible to rutting and wheel slippage
Cathro	Wetness
	Susceptible to rutting and wheel slippage
Tawas	Wetness
	Susceptible to rutting and wheel slippage
406A:	
Loxley	Wetness
	Susceptible to rutting and wheel slippage
407A:	
Seelyeville	Wetness
	Susceptible to rutting and wheel slippage
Markey	Wetness
	Susceptible to rutting and wheel slippage
410A:	
Seelyeville	Wetness
	Susceptible to rutting and wheel slippage
_	
Cathro	Wetness
	Susceptible to rutting and wheel slippage
4400	
412A:	<u> </u>
Rifle	Wetness
	Susceptible to rutting and wheel slippage
_	
Tacoosh	
	Susceptible to rutting and wheel slippage
4153.	
415A:	
Greenwood	
	Susceptible to rutting and wheel slippage
439B:	
	Poor traction (loose sandy material)
GrayCarm	Poor traction (loose sandy material)
Menahga	Poor traction (loose sandy material)
menanga	Poor traction (loose sandy material)
439C:	
	Poor traction (loose sandy material)
GrayCarm	Poor traction (loose sandy material)
Menahga	Poor traction (loose sandy material)
menanya	Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
439D:	
Graycalm	Slope
	Poor traction (loose sandy material)
Menahga	Slope
	Poor traction (loose sandy material)
441C:	
Freeon	Wetness
Cathro	Wetness
	Susceptible to rutting and wheel slippage
442C:	
Haugen	Wetness
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
443D:	
Amery	Slope
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
461A:	
Bowstring	_
	Wetness
	Susceptible to rutting and wheel slippage
4045	
484A:	Water and
Greenwood	
	Susceptible to rutting and wheel slippage
Beseman	Wetness
2000	Susceptible to rutting and wheel slippage
i	basespersie to ratering and miser sirppage
495B:	
Karlsborg	Wetness
Ī	Poor traction (loose sandy material)
İ	-
Grettum	Poor traction (loose sandy material)
Perida	Wetness
	Poor traction (loose sandy material)
495C:	
Karlsborg	
	Poor traction (loose sandy material)
Grettum	Poor traction (loose sandy material)
Perida	
	Poor traction (loose sandy material)
40FD -	
495D:	gl and
Karlsborg	_
	Wetness
	Poor traction (loose sandy material)
Grettum	Slope
Grecomi	Poor traction (loose sandy material)
	1001 claction (100se sandy material)
· ·	

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
495D:	
Perida	Slope
	Wetness
	Poor traction (loose sandy material)
497A:	
Meenon	Wetness
	Poor traction (loose sandy material)
515A:	
Manitowish	No major considerations
521A:	
Dody	Wetness
	Susceptible to rutting and wheel slippage
	Poor traction (loose sandy material)
524E:	
Rock outcrop.	
Frogcreek	Wetness
_	Areas of rock outcrop
Metonga	-
	Areas of rock outcrop
5405	
542B:	Wahaasa
Haugen, very stony	Wetness
Haugen	Wetness
naugon	l leading to the second
542C:	
Haugen, very stony	Wetness
Haugen	Wetness
E42D -	
543B:	Susceptible to rutting and wheel slippage
Anigon	busceptible to lutting and wheel slippage
543C2:	
Anigon	Susceptible to rutting and wheel slippage
544F:	
Menahga	-
	Poor traction (loose sandy material)
Mahtomedi	Slone
Mancomedi	Poor traction (loose sandy material)
	State of (1995) band, material)
555A:	
Fordum	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
574D ·	
574B:	Poor traction (loose conductorial)
baynet	Poor traction (loose sandy material)
574C:	
	Poor traction (loose sandy material)
_	
574E:	
Sayner	-
	Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
BOII Name	
579B:	Wetness
Parkfalls	wethess
600A:	 Onsite investigation required
napiosapiists	Onsite investigation required
Psammaquents	Onsite investigation required
615B:	
Cress	No major considerations
615C:	
Cress	No major considerations
615D:	
Cress	Slope
623A:	
Capitola	Wetness Susceptible to rutting and wheel slippage
624A: Ossmer	Wetness
OSSMET	Nethess
632A: Aftad	Wetness
Altau	Nethess
632B: Aftad	Wotpogg
Altad	wethess
632C: Aftad	Wotness
Altau	Nethess
633F: Pence	 Slope
rence	310pe
Padus	Slope
648B:	
Sconsin	Wetness
670C:	
Keweenaw	No major considerations
Pence	 No major considerations
670E:	
Keweenaw	 Slope
Dongo	Clone
Pence	Slope
671B:	Water and
Spoonerhill, stony	wethess
Spoonerhill	Wetness
680B:	
Stanberry, stony	Wetness
Pence, stony	 No major considerations
_	
683A: Tipler	No major considerations
-	

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
BOII Hame	
706A: Winterfield	 Flooding Wetness Poor traction (loose sandy material)
Totagatic	 Flooding Wetness Poor traction (loose sandy material)
724A: Rib	 Wetness Areas of rock outcrop Susceptible to rutting and wheel slippage
Rock outcrop.	
726B: Sissabagama	 Wetness Poor traction (loose sandy material)
733A: Wozny	 Wetness Susceptible to rutting and wheel slippage
771A: Lenroot	 Poor traction (loose sandy material)
827A: Scoba	 No major considerations
853C: Frogcreek	 Wetness
Stinnett	Wetness
Wozny	 Wetness Susceptible to rutting and wheel slippage
856B: Stinnett	 Wetness
857B: Frogcreek	 Wetness
857C: Frogcreek	 Wetness
873B: Stanberry	 Wetness
873C: Stanberry	 Wetness
873D: Stanberry	 Slope Wetness
905A: Cublake	 Wetness Poor traction (loose sandy material)
926A: Flink	 Wetness Poor traction (loose sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and	considerations
soil name	
943D:	
Stanberry	Slope
	Wetness
į	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	No major considerations
Pence	No major gongidorations
r ence	No major considerations
Greenwood	Wetness
İ	Susceptible to rutting and wheel slippage
970E: Keweenaw	Clone
Veweeliam	510pe
Pence	Slope
I	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
1070C:	
Fremstadt	Poor traction (loose sandy material)
I	
Cress	No major considerations
1070D:	
Fremstadt	Slope
į	Poor traction (loose sandy material)
_	
Cress	Slope
1080B:	
Spoonerhill	Wetness
Spoonerhill, stony	Wetness
Cress	No major considerations
1653C:	
Stanberry	Wetness
 Parkfalls	Wetness
raikiaiis	Nethess
Wozny	Wetness
I	Susceptible to rutting and wheel slippage
2015.	
Pits	
2050.	
Landfill	
3011A:	
Barronett	Wetness
j	Susceptible to rutting and wheel slippage
į	
3125A:	Waterana
Meehan	Wetness Poor traction (loose sandy material)
	1001 craction (100se sandy material)

Table 11.--Forest Land Harvest Equipment Considerations--Continued

Map symbol	Forest land harvest equipment
and soil name	considerations
3126A: Wurtsmith	Poor traction (loose sandy material)
3276A: Au Gres	Wetness Poor traction (loose sandy material)
3312B: Glendenning, very stony	Wetness
Glendenning	Wetness
3336A: Fenander	Wetness
3403A: Loxley	Wetness Susceptible to rutting and wheel slippage
Beseman	Wetness Susceptible to rutting and wheel slippage
Dawson	Wetness Susceptible to rutting and wheel slippage
3424C: Frogcreek	Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
3446A: Newson	Wetness Susceptible to rutting and wheel slippage Poor traction (loose sandy material)
3448B:	Poor traction (loose sandy material)
3448C: Grettum	Poor traction (loose sandy material)
3516A: Slimlake	No major considerations
3629B: Perida	Wetness Poor traction (loose sandy material)
M-W. Miscellaneous water	
W. Water	

Table 12.--Forest Haul Road Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest haul road
and	considerations
soil name	
22	
3A:	
Totagatic	_
	Wetness
	Low bearing strength
Bowstring	Flooding
	Wetness
	Low bearing strength
	l now bearing screngen
Ausable	Flooding
	Wetness
	Low bearing strength
22A:	
Comstock	Wetness
	Low bearing strength
	Dow Douring Derongen
0.45	
24A:	<u></u>
Poskin	Wetness
	Low bearing strength
27A:	
Scott Lake	No major considerations
	,
28B:	

Haugen, very stony	Wetness
Haugen	Wetness
Rosholt, very stony	No major considerations
i	
Rosholt	No major considerations
28C:	
	01
Haugen, very stony	_
	Wetness
Haugen	Slope
	Wetness
i	
Rosholt, very stony	Slone
ROBHOIC, Very Scony	biope
Rosholt	Slope
33B:	
Chetek	No major considerations
33C:	
Chetek	Slope
	===#=
203.	
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
i	
38C:	
Rosholt	Slope
VODITOT C	nrohe
38D:	
Rosholt	Slope

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	001121401401011
SOII Halle	
42D:	
Amery	Slope
-	_
43B:	
Antigo	No major considerations
43C:	
Antigo	Slope
	21020
40-	
43D:	
Antigo	Slope
48A:	
Brill	Wetness
	Low bearing strength
	now bearing screngen
63A:	
Crystal Lake	Wetness
İ	Low bearing strength
i	
63B:	
	Watersan
Crystal Lake	Wetness
	Low bearing strength
63C:	
Crystal Lake	Slope
crystar name	-
	Wetness
	Low bearing strength
63E:	
Crystal Lake	Slope
- i	Wetness
	Low bearing strength
	now bearing screngen
64A:	
Totagatic	Flooding
	Wetness
İ	Low bearing strength
i	5 5
Wintersial A	m1 4:
Winterfield	Flooding
	Wetness
69B:	
Keweenaw	No major considerations
i	-
Sayner	No major considerations
palmer	10 mg of considerations
Vilas	No major considerations
69C:	
Keweenaw	Slope
i	-
Saunor	Clone
Sayner	probe
Vilas	Slope
69E:	
Keweenaw	Slope
	• *
G	G1
Sayner	Slope
Vilas	Slope
İ	
'	

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
74B:	
Vilas	No major considerations
74C:	
Vilas	 Slope
VIIas	Slope
74D:	
Vilas	Slope
100-	
100B:	
Menahga	No major considerations
100C:	
Menahga	Slope
100D:	
Menahga	Slope
127D:	
Amery	Slope
Rosholt	Slope
127E:	
Amery	Slope
Rosholt	Slope
156B:	
Magnor, very stony	Wetness
Magnor	Wetness
J.	
157B:	
Freeon, very stony	Wetness
• • •	
Freeon	Wetness
157C:	
Freeon, very stony	Slope
1100011, 1017 200117	Wetness
Freeon	 Slope
riecon	Wetness
	Wethess
160A:	I
Oesterle	Wetness
OEDUGITE	Wetness
1000.	
182B:	No major gongid
Padus	NO major considerations
1000	
182C:	
Padus	Slope
1000	
192A:	
Worcester	Wetness
193A:	
Minocqua	Wetness
	Low bearing strength
215B:	
Pence	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
215C:	
Pence	Slope
215D:	
Pence	Slope
315A:	
Rib	Wetness
	Low bearing strength
337A:	
Plover	Wetness
368B:	
Mahtomedi	No major considerations
_	
Cress	No major considerations
2609	
368C:	Clana
Mahtomedi	Slope
G	61 ·····
Cress	Slope
368D:	
Mahtomedi	Clone
Mancomedi	STOPE
Cress	Slope
C1688	biope
371A:	
Croswell	No major considerations
0100011	iio iiiajoi ooiibiaoiaoiib
380B:	
Cress	No major considerations
İ	
Rosholt	No major considerations
380C:	
Cress	Slope
Rosholt	Slope
380D:	
Cress	Slope
Rosholt	Slope
383B:	
Mahtomedi	No major considerations
2020.	
383C:	61
Mahtomedi	Slope
383D:	
Mahtomedi	Clone
Man comedi	Slope
396B:	
Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
· · <u>/</u>	
397A:	
Perchlake	Wetness
i	

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
399B:	
Grayling	No major considerations
399C:	Clone
Grayling	Slope
399D:	
Grayling	Slope
405A:	
Lupton	Wetness
	Low bearing strength
Cathro	Wetness
cacinito	Low bearing strength
Tawas	Wetness Low bearing strength
	now bearing screngen
406A:	
Loxley	
	Low bearing strength
407A:	
Seelyeville	
	Low bearing strength
Markey	Wetness
	Low bearing strength
410A:	
Seelyeville	Wetness
	Low bearing strength
Cathro	Wetness
	Low bearing strength
412A: Rifle	Wetness
	Low bearing strength
_	
Tacoosh	Wetness Low bearing strength
415A:	
Greenwood	Wetness Low bearing strength
	low bearing belongen
439B:	
Graycalm	No major considerations
Menahga	No major considerations
439C: Graycalm	Slope
Menahga	Slope
439D:	
Graycalm	Slope
Menahga	Slope

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
441C:	
Freeon	01
rieeon	Slope
	Wetness
Cathro	
	Low bearing strength
442C:	
Haugen	Slope
	Wetness
Greenwood	Wetness
	Low bearing strength
443D:	
Amery	Slope
Greenwood	Wetness
	Low bearing strength
461A:	
Bowstring	Flooding
3	Wetness
	Low bearing strength
	zon bouring borongon
484A:	
Greenwood	Wetness
0100111000	Low bearing strength
	now bearing screngen
Beseman	Wetness
Deseman	Low bearing strength
	now bearing screngen
495B:	
Karlsborg	Wetness
Railbboig	Mechess
Grettum	No major considerations
GI e C Cum	No major considerations
Perida	Wetness
Perida	wechess
495C:	
	G1
Karlsborg	-
	Wetness
	-2
Grettum	Slope
Perida	
	Wetness
4055	
495D:	
Karlsborg	-
	Wetness
Grettum	Slope
	_
Perida	
	Wetness
497A:	
Meenon	Wetness
515A:	
Manitowish	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
521A:	
Dody	
-	Low bearing strength
524E:	
Rock outcrop.	
Frogcreek	 Slope
1109010011	Wetness
	Areas of rock outcrop
Metonga	_
	Areas of rock outcrop
542B:	
Haugen, very stony	Wetness
Haugen	Wetness
542C:	
Haugen, very stony	Slope
	Wetness
Haugen	:
	Wetness
543B:	
Anigon	Low bearing strength
543C2:	
Anigon	Slope Low bearing strength
544F:	
Menahga	Slope
Mahtomedi	 Slope
	51000
555A:	
Fordum	
	Wetness Low bearing strength
	now bearing strength
574B:	
Sayner	No major considerations
5846	
574C: Sayner	Slone
bayner	Blope
574E:	
Sayner	Slope
F70D.	
579B: Parkfalls	 Wetness
	··
600A:	
Haplosaprists	Onsite investigation required
P	
rsammaquents	Onsite investigation required
615B:	
Cress	No major considerations

Table 12.--Forest Haul Road Considerations--Continued

Map symbol and	Forest haul road considerations
soil name	Considerations
615C:	
Cress	Slope
615D:	
Cress	Slope
623A: Capitola	Wetness
Capitola	Low bearing strength
624A:	Watersan
Ossmer	Wetness
632A:	
Aftad	Wetness
632B:	
Aftad	 Wetness
632C:	
Aftad	Slope Wetness
633F:	
Pence	Slope
Padus	 Slope
	-
648B:	
Sconsin	Wetness
670C:	
Keweenaw	Slope
Pence	 Slope
rence	Blope
670E:	
Keweenaw	Slope
Pence	 Slope
2 5110 5	510p0
671B:	
Spoonerhill, stony	Wetness
Spoonerhill	 Wetness
-	
680B:	Waterage
Stanberry, stony	wethess
Pence, stony	No major considerations
683A: Tipler	No major considerations
11b1e1	No major considerations
706A:	
Winterfield	
	Wetness
Totagatic	Flooding
	Wetness

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
724A:	
Rib	Wetness
	Areas of rock outcrop
	Low bearing strength
Rock outcrop.	
•	
726B:	
Sissabagama	Wetness
733A:	
Wozny	Wetness
•	Low bearing strength
771A:	
Lenroot	No major considerations
Zeni oo c	
827A:	
Scoba	No major considerations
50054	No major complactations
853C:	
Frogcreek	Slone
riogcieek	Wetness
	Wechess
Stinnett	Wetness
Scrimecc	Wechess
Wozny	Wotpogg
WOZIIY	Low bearing strength
	now bearing screngen
856B:	
Stinnett	Wetness
beimece	Wethers
857B:	
Frogcreek	Wetness
857C:	
Frogcreek	Slope
3	Wetness
873B:	
Stanberry	Wetness
-	
873C:	
Stanberry	Slope
-	Wetness
873D:	
Stanberry	Slope
-	Wetness
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
943D:	
Stanberry	Slope
-	Wetness
Greenwood	Wetness
	Low bearing strength

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	Slope
Pence	Slope
Greenwood	Wetness
	Low bearing strength
970E:	
Keweenaw	Slope
Denge	Clana
Pence	Slope
Greenwood	Wetness
01001111000	Low bearing strength
	2011 2011 211 2010 119 11
1070C:	
Fremstadt	Slope
Cress	Slope
1070D:	
Fremstadt	Slope
Cress	Slope
1080B:	
Spoonerhill	Wetness
Creenembill sterv	Wetness
Spoonerhill, stony	Wechess
Cress	No major considerations
	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
1653C:	
Stanberry	Slope
_	Wetness
Parkfalls	Wetness
Wozny	Wetness
	Low bearing strength
0015	
2015. Pits	
FILS	
2050.	
Landfill	
3011A:	
Barronett	Wetness
j	Low bearing strength
3125A:	
Meehan	Wetness
3126A:	
Wurtsmith	No major considerations
0075	
3276A:	Waterana
Au Gres	Wetness

Table 12.--Forest Haul Road Considerations--Continued

Map symbol	Forest haul road
and	considerations
soil name	
3312B:	
Glendenning, very stony	Wetness
,	
Glendenning	Wetness
3336A: Fenander	Webness
renander	wechess
3403A:	
Loxley	Wetness
	Low bearing strength
Beseman	Wetness
Deseman	Low bearing strength
	Low Bearing Berengen
Dawson	Wetness
	Low bearing strength
24049	
3424C: Frogcreek	Slone
Tiogorock	Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
-	
3446A:	
Newson	
	Low bearing strength
3448B:	
Grettum	No major considerations
3448C: Grettum	Clana
GIECCUM	Slope
3516A:	
Slimlake	No major considerations
26000	
3629B: Perida	Wetness
r G1 1ua	necness
M-W.	
Miscellaneous water	
W. Water	
nacci	
	<u> </u>

Table 13.--Forest Log Landing Considerations

(See text for a description of the considerations listed in this table)

Map symbol	Forest log landing
and	considerations
soil name	
3A:	
Totagatic	Flooding
10tagatit	-
	Wetness
	Susceptible to rutting and wheel slippage
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Ausable	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	babeeperbre to racting and wheer brippage
223	
22A:	
Comstock	Wetness
	Susceptible to rutting and wheel slippage
24A:	
Poskin	Wetness
	Susceptible to rutting and wheel slippage
27A:	
Scott Lake	No major considerations
28B:	
Haugen, very stony	Wetness
Haugen	Wetness
J	
Rosholt, very stony	No major considerations
nosmozo, vozy soczy	
Rosholt	No major gangidorations
ROSHOIC	NO major considerations
00.7	
28C:	
Haugen, very stony	Slope
	Wetness
Haugen	Slope
_	Wetness
Rosholt, very stony	Slope
MODBIOIC, VELY SCORY	biopo
Darkala	
Rosholt	Slope
33B:	
Chetek	No major considerations
33C:	
Chetek	Slope
38A:	
Rosholt	No major considerations
38B:	
Rosholt	No major considerations
38C:	
Rosholt	Slope
	·

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and soil name	considerations
soli name	
38D:	
Rosholt	Slope
42D:	gl -m-
Amery	Slope
43B:	
Antigo	No major considerations
40-7	
43C: Antigo	Slope
1	51050
43D:	
Antigo	Slope
48A:	
Brill	Wetness
İ	Susceptible to rutting and wheel slippage
63A: Crystal Lake	Wetness
Crystal Lake	Susceptible to rutting and wheel slippage
j	
63B:	
Crystal Lake	
	Susceptible to rutting and wheel slippage
63C:	
Crystal Lake	Slope
	Wetness
	Susceptible to rutting and wheel slippage
63E:	
Crystal Lake	Slope
	Wetness
	Susceptible to rutting and wheel slippage
64A:	
Totagatic	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
Winterfield	Flooding
	Wetness
69B:	
Keweenaw	No major considerations
i	-
Sayner	No major considerations
Vilas	No major considerations
***************************************	no major compressations
69C:	
Keweenaw	Slope
Sayner	Slope
Day MCL	51090
Vilas	Slope
69E:	Slone
Keweenaw	Slope
Sayner	Slope
Vilas	Slope
l	

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
	<u> </u>
E4D	
74B:	
Vilas	No major considerations
74C:	
Vilas	Slope
74D:	
Vilas	Slope
	22020
100B:	
	No major gangidorations
Menahga	No major considerations
100C:	
Menahga	Slope
100D:	
Menahga	Slope
127D:	
Amery	Slope
2	
Rosholt	 Slope
ROSHOIC	blobe
105-	
127E:	
Amery	Slope
Rosholt	Slope
156B:	
Magnor, very stony	Wetness
Magnor	Wetness
magnor	NCCITCED
157B:	
	Matanaga
Freeon, very stony	wetness
_	
Freeon	Wetness
157C:	
Freeon, very stony	Slope
	Wetness
Freeon	Slope
	Wetness
160A:	[
	 Wetness
Oesterle	MECHESS
182B:	
Padus	No major considerations
182C:	
Padus	Slope
192A:	
Worcester	Wetness
193A:	
	Wetness
Minocqua	
	Susceptible to rutting and wheel slippage
215B:	
Pence	No major considerations
	-

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and soil name	considerations
SOII Hame	
215C: Pence	Slope
215D: Pence	Slope
315A: Rib	Wetness Susceptible to rutting and wheel slippage
337A: Plover	Wetness
368B: Mahtomedi	No major considerations
Cress	No major considerations
368C: Mahtomedi	Slope
Cress	Slope
368D: Mahtomedi	Slope
Cress	Slope
371A: Croswell	No major considerations
380B: Cress	No major considerations
Rosholt	No major considerations
380C: Cress	Slope
Rosholt	Slope
380D: Cress	Slope
Rosholt	Slope
383B: Mahtomedi	No major considerations
383C: Mahtomedi	Slope
383D: Mahtomedi	Slope
396B: Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
397A: Perchlake	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol and soil name	Forest log landing considerations
399B: Grayling	No major considerations
399C: Grayling	Slope
399D: Grayling	Slope
405A:	
Lupton	Wetness Susceptible to rutting and wheel slippage
Cathro	Wetness Susceptible to rutting and wheel slippage
Tawas	Wetness Susceptible to rutting and wheel slippage
406A: Loxley	Wetness Susceptible to rutting and wheel slippage
407A: Seelyeville	Wetness Susceptible to rutting and wheel slippage
Markey	Wetness Susceptible to rutting and wheel slippage
410A: Seelyeville	Wetness Susceptible to rutting and wheel slippage
Cathro	Wetness Susceptible to rutting and wheel slippage
412A: Rifle	Wetness Susceptible to rutting and wheel slippage
Tacoosh	Wetness Susceptible to rutting and wheel slippage
415A: Greenwood	Wetness Susceptible to rutting and wheel slippage
439B: Graycalm	No major considerations
Menahga	No major considerations
439C: Graycalm	Slope
Menahga	Slope
439D: Graycalm	Slope
Menahga	Slope

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
441C:	
Freeon	Slope
İ	Wetness
Cathro	Wetness
	Susceptible to rutting and wheel slippage
442C:	
Haugen	Slope
Ī	Wetness
_	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
443D:	
Amery	Slope
_	
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
461A:	
Bowstring	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
484A:	
Greenwood	Wetness
İ	Susceptible to rutting and wheel slippage
_	
Beseman	Wetness Susceptible to rutting and wheel slippage
	susceptible to futting and wheel slippage
495B:	
Karlsborg	Wetness
Grettum	No major considerations
GIECCUM	No major considerations
Perida	Wetness
495C:	gl -m-
Karlsborg	Wetness
Grettum	Slope
Perida	Slope Wetness
	no careas
495D:	
Karlsborg	Slope
	Wetness
Grettum	Slope
Perida	Slope
	Wetness
4973	
497A: Meenon	Wetness
515A:	
Manitowish	No major considerations

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	CONDITIONS
SOII Halle	
521A:	
Dody	Wetness
-	Susceptible to rutting and wheel slippage
	babooperbie to ratering and wheel brippage
524E:	
Rock outcrop.	
Frogcreek	Slone
11090100	Wetness
	Areas of rock outcrop
Metonga	Slope
	Areas of rock outcrop
542B:	
Haugen, very stony	Wetness
Haugen	Wetness
-	
542C:	
	63
Haugen, very stony	_
	Wetness
Haugen	Slope
	Wetness
	Wechess
543B:	
Anigon	Susceptible to rutting and wheel slippage
543C2:	
	Clana
Anigon	_
	Susceptible to rutting and wheel slippage
544F:	
Menahga	Slope
J	•
Mahtomedi	glone
Mancomedi	Slope
555A:	
Fordum	Flooding
	Wetness
	Susceptible to rutting and wheel slippage
	Susceptible to lutting and wheel slippage
574B:	
Sayner	No major considerations
i	
574C:	
Sayner	Clone
Sayner	Slope
574E:	
Sayner	Slope
İ	
579B:	
Parkfalls	Wetness
ratkialis	Wetness
600A:	
Haplosaprists	Onsite investigation required
Daamma au on t-a	Ongito invogtigation required
rsammaquents	Onsite investigation required
615B:	
Cress	No major considerations
i	

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
615C:	
Cress	Slope
01000	510p0
61ED.	
615D:	
Cress	Slope
623A:	
Capitola	Wetness
	Susceptible to rutting and wheel slippage
624A:	
Ossmer	Wetness
i	
632A:	
Aftad	Wetness
112 044	Nethebb
(22D)	
632B:	***
Aftad	Wetness
632C:	
Aftad	Slope
	Wetness
633F:	
Pence	Slope
Padus	Slone
I dddb	510pc
648B:	

Sconsin	Wetness
670C:	
Keweenaw	Slope
Pence	Slope
670E:	
Keweenaw	Slope
i	
Pence	Slope
671B:	
	Wotnogg
Spoonerhill, stony	NECLICAS
	<u></u>
Spoonerhill	wetness
680B:	
Stanberry, stony	Wetness
Pence, stony	No major considerations
İ	
683A:	
Tipler	No major considerations
	,
706A:	
Winterfield	 Flooding
MIUCELITEIG	Flooding
	Wetness
Totagatic	_
	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
724A:	
Rib	Wetness
	Areas of rock outcrop
	Susceptible to rutting and wheel slippage
Rock outcrop.	
726B:	
Sissabagama	Wetness
733A:	
Wozny	Wetness
	Susceptible to rutting and wheel slippage
	babeeperbre to racerng and wheer brippage
7713.	
771A:	
Lenroot	No major considerations
827A:	
Scoba	No major considerations
853C:	
Frogcreek	Slope
3	Wetness
Ctinnott	Wetness
Stinnett	wechess
Wozny	
	Susceptible to rutting and wheel slippage
856B:	
Stinnett	Wetness
857B:	
Frogcreek	Wetness
1109010011	
857C:	
	[
Frogcreek	:
	Wetness
873B:	
Stanberry	Wetness
873C:	
Stanberry	Slope
-	Wetness
873D:	I
Stanberry	:
	Wetness
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
943D:	[
Stanberry	 Slone
pramerry	:
	Wetness
Greenwood	·
	Susceptible to rutting and wheel slippage

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
948A:	
Billyboy	No major considerations
970C:	
Keweenaw	Slope
Pence	 Slope
rence	Stope
Greenwood	Wetness
	Susceptible to rutting and wheel slippage
970E:	
Keweenaw	Slope
Pence	Slope
Greenwood	Wetness
Gleenwood	Susceptible to rutting and wheel slippage
	baboopoible to lateling and wheel blippage
1070C:	
Fremstadt	Slope
Cress	Slope
1070D:	
Fremstadt	Slope
Cress	Slope
Clebs	Blope
1080B:	
Spoonerhill	Wetness
Spoonerhill, stony	Wetness
_	
Cress	No major considerations
1653C:	
Stanberry	Slope
-	Wetness
Parkfalls	Wetness
Wozny	Wetness
	Susceptible to rutting and wheel slippage
2015.	
Pits	
-	
2050.	
Landfill	
3011A:	Water and
Barronett	
	Susceptible to rutting and wheel slippage
3125A:	
Meehan	Wetness
3126A:	
Wurtsmith	No major considerations
3276A:	
Au Gres	Wetness

Table 13.--Forest Log Landing Considerations--Continued

Map symbol	Forest log landing
and	considerations
soil name	
3312B:	
Glendenning, very stony	Wetness
Glendenning	Wetness
3336A: Fenander	Wetness
3403A: Loxley	Wetness Susceptible to rutting and wheel slippage
Beseman	Wetness Susceptible to rutting and wheel slippage
Dawson	Wetness Susceptible to rutting and wheel slippage
3424C:	
Frogcreek	Slope Wetness
Magroc	Wetness
Stinnett	Wetness
Rock outcrop.	
3446A: Newson	Wetness Susceptible to rutting and wheel slippage
3448B: Grettum	No major considerations
3448C: Grettum	Slope
3516A: Slimlake	No major considerations
3629B: Perida	Wetness
M-W. Miscellaneous water	
W. Water	

Table 14.--Forest Land Site Preparation and Planting Considerations
(See text for a description of the considerations listed in this table)

Map symbol	Forest land site preparation and planting
and soil name	considerations
3A: Totagatic	Flooding Wetness
Bowstring	Flooding Wetness
Ausable	Flooding Wetness
22A: Comstock	 Wetness Potential poor tilth and compaction
24A: Poskin	Wetness Cobbly surface
27A: Scott Lake	Cobbly surface
28B: Haugen, very stony	Wetness Surface stones Cobbly surface
Haugen	Wetness Cobbly surface
Rosholt, very stony	Surface stones Cobbly surface
Rosholt	Cobbly surface
28C: Haugen, very stony	Wetness Surface stones Cobbly surface Water erosion
Haugen	Wetness Cobbly surface Water erosion
Rosholt, very stony	Surface stones Cobbly surface Water erosion
Rosholt	Cobbly surface Water erosion
33B: Chetek	Cobbly surface
33C: Chetek	Cobbly surface Water erosion
38A: Rosholt	Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
38B: Rosholt	Cobbly surface
38C: Rosholt	Cobbly surface Water erosion
38D: Rosholt	Slope Cobbly surface Water erosion
42D: Amery	Slope Surface stones Cobbly surface Water erosion
43B: Antigo	Cobbly surface
43C: Antigo	Cobbly surface Water erosion
43D: Antigo	Slope Cobbly surface Water erosion
48A: Brill	Wetness Cobbly surface
63A: Crystal Lake	Wetness Potential poor tilth and compaction
63B: Crystal Lake	Wetness Potential poor tilth and compaction
63C: Crystal Lake	Wetness Water erosion Potential poor tilth and compaction
63E: Crystal Lake	Slope Wetness Water erosion Potential poor tilth and compaction
64A: Totagatic	Flooding Wetness
Winterfield	Flooding Wetness

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
69B: Keweenaw	Surface stones
Sayner	Surface stones Cobbly surface
Vilas	Surface stones
69C:	
Keweenaw	Surface stones Water erosion
Sayner	Surface stones Cobbly surface
	Water erosion
Vilas	Surface stones Water erosion
69E:	
Keweenaw	Slope
İ	Surface stones
	Water erosion
Sayner	Slope
12,000	Surface stones
	Cobbly surface
	Water erosion
Vilas	Slope
İ	Surface stones
	Water erosion
74B:	No major considerations
74C: Vilas	Water erosion
74D:	
Vilas	-
	Water erosion
100B:	
Menahga	No major considerations
100C:	
Menahga	Water erosion
100D:	
Menahga	Slope
	Water erosion
1270.	
127D: Amery	 Slope
-	Surface stones
!	Cobbly surface
	Water erosion
Rosholt	Slope
İ	Surface stones
	Cobbly surface
	Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
315A: Rib	Wetness Cobbly surface Potential poor tilth and compaction
337A: Plover	Wetness
368B: Mahtomedi	Cobbly surface
Cress	Cobbly surface
368C: Mahtomedi	Cobbly surface Water erosion
Cress	Cobbly surface Water erosion
368D: Mahtomedi	Slope Cobbly surface Water erosion
Cress	Slope Cobbly surface Water erosion
371A: Croswell	No major considerations
380B: Cress	Cobbly surface
Rosholt	Cobbly surface
380C: Cress	Cobbly surface Water erosion
Rosholt	Cobbly surface Water erosion
380D: Cress	Slope Cobbly surface Water erosion
Rosholt	Slope Cobbly surface Water erosion
383B: Mahtomedi	Cobbly surface
383C: Mahtomedi	Cobbly surface Water erosion
383D: Mahtomedi	Slope Cobbly surface Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	
396B:	
Friendship	No major considerations
Wurtsmith	No major considerations
Grayling	No major considerations
397A: Perchlake	Wetness
399B: Grayling	No major considerations
399C: Grayling	Water erosion
399D: Grayling	Slope Water erosion
405A:	Wetness
Cathro	Wetness
Tawas	Wetness
406A:	Wetness
407A: Seelyeville	Wetness
Markey	Wetness
410A: Seelyeville	Wetness
Cathro	Wetness
412A: Rifle	Wetness
Tacoosh	Wetness
415A: Greenwood	Wetness
439B: Graycalm	Cobbly surface
Menahga	No major considerations
439C: Graycalm	Cobbly surface Water erosion
Menahga	Water erosion
439D: Graycalm	Slope Cobbly surface Water erosion

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	Considerations
İ	
439D:	61
Menahga	Slope Water erosion
i	water erosion
141C:	
Freeon	Wetness
	Surface stones
	Cobbly surface Water erosion
j	
Cathro	Wetness
440.0	
442C: Haugen	Wetness
ladgen	Surface stones
į	Cobbly surface
I	Water erosion
3	Water
Greenwood	Wetness
443D:	
Amery	Slope
	Surface stones
Į.	Cobbly surface
	Water erosion
Greenwood	Wetness
461A:	
Bowstring	_
	Wetness
484A:	
Greenwood	Wetness
Beseman	Wetness
495B:	
Karlsborg	Wetness
Grettum	No major considerations
 Perida	Wetness
495C:	
Karlsborg	
	Water erosion
Grettum	Water erosion
Perida	Wetness
	Water erosion
495D:	
Karlsborg	Slope
-	Wetness
j	Water erosion
G. a. b. b. a. a.	61
Grettum	_
	Water erosion
Perida	Slope
	Wetness

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol	Forest land site preparation and planting
and	considerations
soil name	
4053	
497A:	Wataana
Meenon	Wetness
515A:	
Manitowish	Cobbly surface
521A:	
Dody	Wetness
524E:	
Rock outcrop.	
Frogcreek	
	Surface stones Areas of rock outcrop
	Cobbly surface
	Water erosion
Metonga	Slope
	Surface stones
	Areas of rock outcrop
	Cobbly surface
	Water erosion
5.405	
542B:	Wetness
Haugen, very stony	Surface stones
	Cobbly surface
Haugen	Wetness
	Cobbly surface
542C:	
Haugen, very stony	
	Surface stones
	Cobbly surface Water erosion
	water erosion
Haugen	Wetness
3	Cobbly surface
	Water erosion
543B:	
Anigon	Cobbly surface
E4202.	
543C2: Anigon	Cobbly surface
wir 2011	Cobbiy surface Water erosion
544F:	
Menahga	Slope
	Water erosion
Mahtomedi	. –
	Cobbly surface
	Water erosion
5557.	
555A: Fordum	 Flooding
1 01 duii	Wetness
	Cobbly surface
	Potential poor tilth and compaction

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
574B: Sayner	Cobbly surface
574C: Sayner	Cobbly surface Water erosion
574E: Sayner	Slope Cobbly surface Water erosion
579B: Parkfalls	Wetness Surface stones
600A: Haplosaprists	Onsite investigation required
Psammaquents	Onsite investigation required
615B: Cress	Cobbly surface
615C: Cress	Cobbly surface Water erosion
615D: Cress	Slope Cobbly surface Water erosion
623A: Capitola	Wetness Surface stones
624A: Ossmer	Wetness Cobbly surface
632A: Aftad	Wetness
632B: Aftad	Wetness
632C: Aftad	Wetness Water erosion
633F: Pence	Slope Cobbly surface Water erosion
Padus	Slope Cobbly surface Water erosion
648B: Sconsin	Wetness Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
670C: Keweenaw	Surface stones Cobbly surface Water erosion
Pence	Surface stones Cobbly surface Water erosion
670E: Keweenaw	Slope Surface stones Cobbly surface Water erosion
Pence	Slope Surface stones Cobbly surface Water erosion
671B: Spoonerhill, stony	Wetness Surface stones Cobbly surface
Spoonerhill	Wetness Cobbly surface
680B: Stanberry, stony	Wetness Surface stones
Pence, stony	Surface stones Cobbly surface
683A: Tipler	Cobbly surface
706A: Winterfield	Flooding Wetness
Totagatic	Flooding Wetness
724A: Rib	Wetness Areas of rock outcrop Cobbly surface Potential poor tilth and compaction
Rock outcrop.	
726B: Sissabagama	Wetness
733A: Wozny	Wetness Surface stones
771A: Lenroot	No major considerations

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and	Forest land site preparation and planting considerations
soil name	considerations
827A:	
Scoba	Cobbly surface
853C:	
Frogcreek	
	Surface stones
	Cobbly surface Water erosion
i	
Stinnett	
	Surface stones Cobbly surface
	comply surface
Wozny	Wetness
	Surface stones
856B:	
Stinnett	Wetness
İ	Surface stones
	Cobbly surface
857B:	
	Wetness
i	Surface stones
	Cobbly surface
857C:	
Frogcreek	Wetness
į	Surface stones
	Cobbly surface
	Water erosion
873B:	
Stanberry	
	Surface stones
873C:	
Stanberry	Wetness
	Surface stones
	Water erosion
873D:	
Stanberry	Slope
	Wetness
	Surface stones Water erosion
j	
905A:	
Cublake	Wetness
926A:	
Flink	Wetness
0427	
943D: Stanberry	Slope
bounderly	Wetness
i	Surface stones
ļ	Water erosion
Greenwood	Wetness
31331W004	- neoneda
948A:	
Billyboy	Cobbly surface

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol and soil name	Forest land site preparation and planting considerations
970C: Keweenaw	Surface stones Cobbly surface Water erosion
Pence	Surface stones Cobbly surface Water erosion
Greenwood	Wetness
970E: Keweenaw	Slope Surface stones Cobbly surface Water erosion
Pence	Slope Surface stones Water erosion
Greenwood	Wetness
1070C: Fremstadt	Surface stones Cobbly surface Water erosion
Cress	Cobbly surface Water erosion
1070D: Fremstadt	Slope Surface stones Cobbly surface Water erosion
Cress	Slope Cobbly surface Water erosion
1080B: Spoonerhill	Wetness Cobbly surface
Spoonerhill, stony	Wetness Surface stones Cobbly surface
 Cress	Cobbly surface
1653C: Stanberry	Wetness Surface stones Water erosion
Parkfalls	Wetness Surface stones
Wozny	Wetness Surface stones
2015. Pits	

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Map symbol	Forest land site preparation and planting
and	considerations
soil name	
2050.	
Landfill	
20113	
3011A:	Watara
Barronett	
	Potential poor tilth and compaction
3125A:	
Meehan	Wetness
Meenan	Hechess
3126A:	
Wurtsmith	No major considerations
3276A:	
Au Gres	Wetness
3312B:	
Glendenning, very stony	Wetness
	Surface stones
	Cobbly surface
Glendenning	Wetness
	Cobbly surface
3336A:	
Fenander	Wetness
2422	
3403A:	
Loxley	wetness
Beseman	Wotnogg
besellan	Wechess
Dawson	Wetness
2450	
3424C:	
Frogcreek	Wetness
	Surface stones
	Cobbly surface
	Water erosion
Magroc	
	Surface stones
	Cobbly surface
and we state	Water and
Stinnett	
	Surface stones
	Cobbly surface
Rock outcrop.	
ROCK Outerop.	
3446A:	
Newson	Wetness
3448B:	
Grettum	No major considerations
3448C:	
Grettum	Water erosion
3516A:	
Slimlake	Cobbly surface
25007	
3629B:	Waterana
Perida	wethess

Table 14.--Forest Land Site Preparation and Planting Considerations--Continued

Forest land site preparation and planting considerations
İ
İ

Table 15.--Forest Habitat Types

(Absence of an entry indicates that no forest habitat type is applicable. See text for descriptions of the forest habitat types listed in this table)

Map symbol and map unit name	 Dominant habitat	 Codominant habitat	Common habitat types	 Region
•	type	types		<u> </u>
3A Totagatic-Bowstring-Ausable complex, 0 to 2 percent slopes, frequently flooded	- 		 	
22AComstock silt loam, 0 to 3 percent slopes	 ASaI 		ACaCi	1
24A Poskin silt loam, 0 to 3 percent slopes	 ASaI 		ACaCi 	
27AScott Lake sandy loam, 0 to 3 percent slopes				1
28B Haugen-Rosholt complex, 2 to 6 percent slopes, very stony	 	AVDe, AAt		1
28C Haugen-Rosholt complex, 6 to 12 percent slopes, very stony		AVDe, AAt		1
33BChetek sandy loam, 1 to 6 percent slopes	 AVDe 			1
33CChetek sandy loam, 6 to 12 percent slopes	 AVDe 			1
Rosholt sandy loam, 0 to 2 percent slopes	 	AVDe, AAt		
Rosholt sandy loam, 2 to 6 percent slopes	 	AVDe, AAt		1
Rosholt sandy loam, 6 to 12 percent slopes		AVDe, AAt		1
38D Rosholt sandy loam, 12 to 20 percent slopes		AVDe, AAt		1
Amery sandy loam, 12 to 25 percent slopes, very stony		AVDe, AAt		
43B Antigo silt loam, 1 to 6 percent slopes	 ACaCi 			1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	Codominant habitat types	Common habitat types 	 Region
43CAntigo silt loam, 6 to 15 percent slopes	 ACaCi 			 1
Antigo silt loam, 15 to 30 percent slopes	 ACaCi 	 		 1
48ABrill silt loam, 0 to 3 percent slopes	 ACaCi 	 		 1
63ACrystal Lake silt loam, 0 to 2 percent slopes	 ACaCi 	 		 1
63B Crystal Lake silt loam, 2 to 6 percent slopes	 ACaCi 	 		 1
63C Crystal Lake silt loam, 6 to 12 percent slopes	 ACaCi 	 		 1
63E Crystal Lake silt loam, 20 to 35 percent slopes	 ACaCi 	 		 1
64A Totagatic-Winterfield complex, 0 to 2 percent slopes, frequently flooded	 	 Lfp, ArVRp 		 1
69B Keweenaw-Sayner-Vilas complex, 2 to 6 percent slopes, stony	 	 PArVAm, AVDe 		 1
69C Keweenaw-Sayner-Vilas complex, 6 to 15 percent slopes, stony	 	 PArVAm, AVDe 	 	 1
69E Keweenaw-Sayner-Vilas complex, 15 to 45 percent slopes, stony	 	 PArVAm, AVDe 		 1
74B Vilas loamy sand, 0 to 6 percent slopes	 PArVAa 	 		 3
74CVilas loamy sand, 6 to 15 percent slopes	 PArVAa 	 		 3
74DVilas loamy sand, 15 to 30 percent slopes	 PArVAa 	 		 3
100B Menahga sand, 0 to 6 percent slopes	PQGCe 	 	 PArVAm 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	Dominant habitat type	Codominant habitat types	Common habitat types 	 Region
100C Menahga sand, 6 to 12 percent slopes	 PQGCe 	 	PArVAm 	1
100D Menahga sand, 12 to 30 percent slopes	 PQGCe 	 	PArVAm 	1
127DAmery-Rosholt complex, 12 to 20 percent slopes, very stony	į	AVDe, AAt - 		1
127E Amery-Rosholt complex, 20 to 45 percent slopes, very stony	į	AVDe, AAt 		1
156B Magnor, very stony-Magnor complex, 0 to 4 percent slopes	 	 ASaI, AAt 		1
157B Freeon, very stony-Freeon complex, 2 to 6 percent slopes	 AA t 	 	ACaCi 	1
157C Freeon, very stony-Freeon complex, 6 to 12 percent slopes	 AAt 	 	ACaCi 	1
160A Oesterle sandy loam, 0 to 2 percent slopes		 	AVDe	1
182B Padus sandy loam, 0 to 6 percent slopes	 ATM 			3
182C Padus sandy loam, 6 to 15 percent slopes	 ATM 			3
192A	TMC 			3
193A Minocqua muck, 0 to 2 percent slopes	 Lwmin 			
215B Pence sandy loam, 0 to 6 percent slopes	AVVb			3
215C Pence sandy loam, 6 to 15 percent slopes	 AVVb 	 	 	3

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	Codominant habitat types	Common habitat types	 Region
215D Pence sandy loam, 15 to 30 percent slopes	 A VVb 			3
315A Rib silt loam, 0 to 2 percent slopes	 Lwmin 			
337A Plover fine sandy loam, 0 to 3 percent slopes	 ArVRp 			1
368B Mahtomedi-Cress complex, 2 to 6 percent slopes	 	PArVAm, AVDe	 	1
368C Mahtomedi-Cress complex, 6 to 12 percent slopes	 	PArVAm, AVDe	 	1
368D Mahtomedi-Cress complex, 12 to 25 percent slopes	!	 PArVAm, AVDe 	 	 1
371A	1		 	3
380B	 	AVDe, AAt	 	1
380C Cress-Rosholt complex, 6 to 12 percent slopes	!	AVDe, AAt	 	1
380D Cress-Rosholt complex, 12 to 25 percent slopes	 	AVDe, AAt	 	1
383B Mahtomedi loamy sand, 0 to 6 percent slopes	 PArVAm 		 PQGCe 	1
383C Mahtomedi loamy sand, 6 to 12 percent slopes	 PArVAm 		 PQGCe 	1
383D Mahtomedi loamy sand, 12 to 30 percent slopes	!		 PQGCe 	1
396B Friendship-Wurtsmith- Grayling complex, 0 to 6 percent slopes	 PQGCe 		 	1
397A Perchlake loamy fine sand, 0 to 2 percent slopes	 ArVRp 		 PArVAm 	 1

Table 15.--Forest Habitat Types--Continued

			- <u>.</u>	
Map symbol and map unit name	Dominant habitat type	Codominant habitat types	Common habitat types 	 Region
399BGrayling sand, 0 to 6 percent slopes	 PQGCe 		 	1
399CGrayling sand, 6 to 12 percent slopes	 PQGCe 	 	 	1
399DGrayling sand, 12 to 30 percent slopes	PQGCe 	 		1
405A Lupton, Cathro, and Tawas soils, 0 to 1 percent slopes	 Lnorg 			
406A Loxley mucky peat, 0 to 1 percent slopes	 Lnorg 	 		
407A Seelyeville and Markey soils, 0 to 1 percent slopes	 Lnorg 			
410A	 Lnorg 			
412ARifle and Tacoosh soils, 0 to 1 percent slopes	 Lnorg 	 		
415AGreenwood mucky peat, 0 to 1 percent slopes	 Lnorg 	 		
439BGraycalm-Menahga complex, 0 to 6 percent slopes		 	PQGCe	1
439CGraycalm-Menahga complex, 6 to 12 percent slopes	•	 	PQGCe	1
439DGraycalm-Menahga complex, 12 to 30 percent slopes	 PArVAm 	 	PQGCe	1
441C Freeon, very stony-Cathro complex, 0 to 15 percent slopes	 	 AAt, AVDe 	 Lnorg 	1
442C Haugen, very stony- Greenwood complex, 0 to 15 percent slopes	į	 AVDe, AAt 	 Laorg 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	Codominant habitat types	 Common habitat types 	 Region
Amery, very stony-Greenwood complex, 0 to 35 percent slopes	!	AVDe, AAt	 Laorg 	 1
461A Bowstring muck, 0 to 1 percent slopes, frequently flooded	į			
484AGreenwood and Beseman soils, 0 to 1 percent slopes	 Laorg 			
495B Karlsborg-Grettum-Perida complex, 1 to 6 percent slopes	 PArVAm 			 1
495C Karlsborg-Grettum-Perida complex, 6 to 12 percent slopes	 PArVAm 			 1
495D Karlsborg-Grettum-Perida complex, 12 to 30 percent slopes	 PArVAm 			 1
497A Meenon loamy sand, 0 to 3 percent slopes	 	ArVRp, PArVam		 1
515A Manitowish sandy loam, 0 to 3 percent slopes			 	 3
521A Dody muck, 0 to 2 percent slopes	 Lwmin 		 	
524E Rock outcrop-Frogcreek- Metonga complex, 2 to 45 percent slopes, very stony	 			3
542B	 	AAt, AVDe		 1
542C	 	AAt, AVDe		 1
543B Anigon silt loam, 2 to 6 percent slopes	 ACaCi 		 	 1

Table 15.--Forest Habitat Types--Continued

	<u> </u>	<u> </u>	!	<u> </u>
Map symbol and map unit name	Dominant habitat type 	Codominant habitat types	Common habitat types 	Region
543C2	 ACaCi 			1
544F Menahga and Mahtomedi soils, 30 to 45 percent slopes	 PArVAm 	 	 PQGCe 	1
555A Fordum silt loam, 0 to 2 percent slopes, frequently flooded	į	 		
574BSayner loamy sand, 0 to 6 percent slopes	 PArVAa 			3
574CSayner loamy sand, 6 to 15 percent slopes	1			3
574ESayner loamy sand, 15 to 45 percent slopes		 	 	3
579B Parkfalls sandy loam, 0 to 4 percent slopes, very stony	 TMC 		ATM	3
600A. Haplosaprists and Psammaquents, 0 to 2 percent slopes	 			
615B Cress sandy loam, 0 to 6 percent slopes	 AVDe 			1
615C Cress sandy loam, 6 to 12 percent slopes	 AVDe 	 		1
615D Cress sandy loam, 12 to 30 percent slopes	!	 	 	1
623A Capitola muck, 0 to 2 percent slopes, very stony	į			
624A Ossmer silt loam, 0 to 3 percent slopes	 ASaI 		 AAt 	1
632AAftad fine sandy loam, 0 to 2 percent slopes	!	 AAt, ACaCi 	 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	 Codominant habitat types	Common habitat types 	 Region
632B Aftad fine sandy loam, 2 to 6 percent slopes	!	 AAt, ACaCi 	 - -	 1
632CAftad fine sandy loam, 6 to 12 percent slopes	 	 AAt, ACaCi 		 1
633F Pence and Padus soils, 30 to 45 percent slopes	 	AVVb, ATM	 	 3
648BSconsin silt loam, 1 to 6 percent slopes	 ACaCi 	 		 1
670C	 AVDe 	 		 1
670E	 AVDe 	 		 1
671B	 AVDe 	 	PArVAm 	 1
680BStanberry-Pence complex, 2 to 6 percent slopes, stony	į	 	 AVVb 	 3
683A Tipler sandy loam, 0 to 3 percent slopes	 ATM 	 	 	
706A Winterfield-Totagatic complex, 0 to 2 percent slopes, frequently flooded	 	ASaI, Lfp	 	1
724A Rib-Rock outcrop complex, 0 to 2 percent slopes	Lwmin 	 	 	
726BSissabagama loamy sand, 0 to 6 percent slopes	 	PArVAm, AVDe 	 	
733A	Lwmin 	 	 	
771A		 	 	1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	Codominant habitat types	 Common habitat types 	 Region
827A Scoba sandy loam, 0 to 3 percent slopes		 AAt, AVDe 		 1
853C Frogcreek-Stinnett-Wozny complex, 0 to 15 percent slopes, very stony	 	 ATM, ATAtOn 	 Lwmin 	 3
856BStinnett silt loam, 0 to 4 percent slopes, very stony	į	 ACaI, ATAtOn 	 ATM 	 3
857BFrogcreek silt loam, 2 to 6 percent slopes, very stony	į	ATM, AOCa	 ATD 	 3
857C Frogcreek silt loam, 6 to 15 percent slopes, very stony	 	 AOCa, ATM 	 ATD 	 3
873BStanberry sandy loam, 1 to 6 percent slopes, very stony	 ATM 	 		 3
873CStanberry sandy loam, 6 to 15 percent slopes, very stony	 ATM 	 		 3
873DStanberry sandy loam, 15 to 30 percent slopes, very stony	!	 		 3
905ACublake loamy sand, 0 to 3 percent slopes	 	 PArVAa, AVVb 		 3
926A Flink loamy sand, 0 to 3 percent slopes	 ArAbVC 	 	 PArVAa 	 3
943DStanberry, very stony- Greenwood complex, 0 to 35 percent slopes	į	 	 Laorg 	 3
948ABillyboy silt loam, 0 to 3 percent slopes		 		 1
970C Keweenaw, stony-Pence, stony-Greenwood complex, 0 to 15 percent slopes	į	 AVDe, AAt 	 Laorg 	 1
970E	į	 AVDe, AAt 	 Laorg 	 1

Table 15.--Forest Habitat Types--Continued

Map symbol and map unit name	 Dominant habitat type 	Codominant habitat types	Common habitat types 	 Region
1070C Fremstadt, stony-Cress complex, 6 to 15 percent slopes	 	AVDe, PArVAm	 	 1
1070D Fremstadt, stony-Cress complex, 15 to 30 percent slopes	 	AVDe, PArVAm	 	 1
1080BSpoonerhill, stony-Cress complex, 1 to	 	 AVDe, PArVAm 	 	 1
6 percent slopes	i I	AVDe, PArVAm	į	1
1653CStanberry-Parkfalls-Wozny complex, 0 to 15 percent slopes, very stony	 	ATM, ATAtOn	Lwmin	 3
2015. Pits	 			
2050. Landfill	 			
3011A Barronett silt loam, 0 to 2 percent slopes				1
3125A Meehan loamy sand, 0 to 2 percent slopes	 ArVRp 		PArVAm 	1
3126A Wurtsmith loamy sand, 0 to 3 percent slopes	 PArVAm 		 	1
3276AAu Gres loamy sand, 0 to 3 percent slopes	 ArAbVC 		 PArVaAa 	3
3312B Glendenning, very stony- Glendenning complex, 0 to 4 percent slopes	 ArVRp 		AVDe	 1
3336A Fenander fine sandy loam, 0 to 2 percent slopes	 Lwmin 		 	
3403A Loxley, Beseman, and Dawson soils, 0 to 1 percent slopes				
3424C Frogcreek-Magroc-Stinnett complex, 0 to 15 percent slopes, very stony, rocky	į Į	ATM, ATAtOn	 	 3

Table 15.--Forest Habitat Types--Continued

	I	1	I	1
Map symbol and map unit name	Dominant habitat type	Codominant habitat types	Common habitat types 	Region
3446A Newson muck, 0 to 2 percent slopes	1		 	
3448BGrettum loamy sand, 0 to 6 percent slopes	 PArVAm 		 	1
3448CGrettum loamy sand, 6 to 12 percent slopes	1			1
3516ASlimlake sandy loam, 0 to 3 percent slopes	 	PArVAm, AVDe	 	1
3629B Perida loamy sand, 0 to 4 percent slopes	 PArVAm 		 	1
M-W. Miscellaneous water	 		 	
W. Water	 -		 	

Table 16a.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Camp areas		Picnic areas		 Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Valu
3A:			 		 	
Totagatic	Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00
	Flooding Ponding	1.00	Ponding Flooding	1.00	Flooding Ponding	1.00
Bowstring	Depth to	1.00	 Very limited Depth to	1.00	: -	1.00
	saturated zone Flooding Content of	 1.00 1.00	saturated zone Content of organic matter	1.00	saturated zone Content of organic matter	1.00
	organic matter Ponding	1.00	Ponding Flooding 	1.00 0.40 	Flooding Ponding 	1.00 1.00
Ausable	Very limited Depth to saturated zone Flooding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	 1.00 1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
22A: Comstock	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
	saturated zone		saturated zone		saturated zone	
24A: Poskin	 - Very limited	 	 Very limited	 	 Very limited	
	Depth to saturated zone	1.00 	Depth to saturated zone 	1.00 	Depth to saturated zone	1.00
27A: Scott Lake	 Not limited 	 	 Not limited 	 	 Somewhat limited Gravel content	0.04
28B:				į		
Haugen, very stony	Somewhat limited Restricted permeability	 0.60 	Somewhat limited Restricted permeability	 0.60 	Somewhat limited Restricted permeability	 0.60
	Too stony Depth to saturated zone	0.50	Too stony Depth to saturated zone	0.50 0.19 	Too stony Depth to	0.50 0.50 0.39
					saturated zone Gravel content	0.05
Haugen	Restricted	0.60		 0.60	 Somewhat limited Restricted	0.60
	permeability Depth to saturated zone	0.39	permeability Depth to saturated zone 	 0.19 	permeability Slope Depth to saturated zone	 0.50 0.39
	 	 	; 	 	Gravel content Content of large stones	0.05

Table 16a.--Recreational Development--Continued

Map symbol and soil name	 Camp areas 		 Picnic areas 		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28B: Rosholt, very stony	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Slope Too stony Gravel content Content of large stones	 0.50 0.50 0.03 0.01
Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Gravel content	 0.50 0.04
28C: Haugen, very stony	Somewhat limited Restricted permeability Too stony Depth to saturated zone Slope	 0.60 0.50 0.39 0.04	Somewhat limited Restricted permeability Too stony Depth to saturated zone Slope	 0.60 0.50 0.19 0.04	Very limited Slope Restricted permeability Too stony Depth to saturated zone Gravel content	 1.00 0.60 0.50 0.39 0.05
Haugen	Somewhat limited Restricted permeability Depth to saturated zone Slope	 0.60 0.39 0.04	Somewhat limited Restricted permeability Depth to saturated zone Slope	 0.60 0.19 0.04	Very limited Slope Restricted permeability Depth to saturated zone Gravel content Content of large stones	 1.00 0.60 0.39 0.05 0.03
Rosholt, very stony	 Somewhat limited Too stony Slope 	 0.50 0.04 	 Somewhat limited Too stony Slope 	 0.50 0.04 		 1.00 0.50 0.03 0.01
Rosholt	 Somewhat limited Slope 	 0.04 	 Somewhat limited Slope 	 0.04 	 Very limited Slope Gravel content 	 1.00 0.04
33B: Chetek	 Not limited 		 Not limited 	 	 Somewhat limited Slope Gravel content Content of large stones	 0.50 0.02 0.01
33C: Chetek	 Somewhat limited Slope 	 0.04 	 Somewhat limited Slope 	 0.04 		 1.00 0.02 0.01
38A: Rosholt	 Not limited 		 Not limited 	 	 Somewhat limited Gravel content	 0.04

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		 Playgrounds 		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
38B: Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Gravel content	 0.50 0.04	
38C: Rosholt	 Somewhat limited Slope 	 0.04	 Somewhat limited Slope 	 0.04	 Very limited Slope Gravel content	 1.00 0.04	
38D: Rosholt	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Gravel content	 1.00 0.04	
42D: Amery	 Very limited Slope Too stony Restricted permeability	 1.00 0.50 0.21 	 Very limited Slope Too stony Restricted permeability	 1.00 0.50 0.21 	Too stony	 1.00 0.50 0.21 0.05 0.03	
43B: Antigo	 Not limited 		 Not limited 		 Somewhat limited Slope	0.50	
43C: Antigo	 Somewhat limited Slope 	 0.37	 Somewhat limited Slope 	 0.37	 Very limited Slope 	1.00	
43D: Antigo	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00	
48A: Brill	 Somewhat limited Depth to saturated zone	 0.98 	 Somewhat limited Depth to saturated zone	 0.75 	 Somewhat limited Depth to saturated zone	 0.98 	
63A: Crystal Lake	 Somewhat limited Depth to saturated zone Restricted permeability	 0.39 0.21	 Somewhat limited Restricted permeability Depth to saturated zone	 0.21 0.19	 Somewhat limited Depth to saturated zone Restricted permeability	 0.39 0.21	
63B: Crystal Lake		 0.39 0.21 	Somewhat limited Restricted permeability Depth to saturated zone	 0.21 0.19 	Somewhat limited Slope Depth to saturated zone Restricted permeability	 0.50 0.39 0.21	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						1
63C:	İ	į		į	İ	İ
Crystal Lake	!	!	Somewhat limited	:	Very limited	
	Depth to saturated zone	0.39	Restricted	0.21	-	1.00
	Restricted	0.21	permeability Depth to	0.19	Depth to saturated zone	0.39
	permeability		saturated zone		Restricted	0.21
	Slope	0.04	Slope	0.04	permeability	
63E:	 		 Vamue limited		 Town limited	
Crystal Lake	Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
	Restricted	0.21	Restricted	0.21	-	0.21
	permeability		permeability		permeability	İ
64A: Totagatic	 Town limited		 Very limited		 Very limited	
iotagatic	Depth to	1.00		1.00	_	1.00
	saturated zone		saturated zone		saturated zone	1
	Flooding	1.00	Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
						1
Winterfield	Very limited Depth to	1.00	Very limited	1.00	Very limited	1.00
	saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Flooding	1.00	Too sandy	0.79	Flooding	1.00
	Too sandy	0.79	Flooding	0.40	Too sandy	0.79
	!	ļ				ļ
69B:	 Somewhat limited		 Somewhat limited		 Somewhat limited	
Keweenaw	Too sandy	0.76	!	0.76	Too sandy	0.76
	100 banay		100 banay		Slope	0.50
		İ		İ	Content of large	
	İ	į		İ	stones	į
_						
Sayner	Somewhat limited Too sandy	0.87	Somewhat limited Too sandy	0.87	Somewhat limited Too sandy	0.87
	100 sandy		100 sandy	0.07	Slope	0.50
					Content of large	
	İ	į		İ	stones	į
	!	ļ			Gravel content	0.02
Vilas	 Somewhat limited		 Somewhat limited		 Somewhat limited	
Vilas	Too sandy	0.87	Too sandy	0.87	!	0.87
	100 sandy		100 sandy		Slope	0.50
				İ	Gravel content	0.04
	[[1
69C:	 				 	
Keweenaw	Too sandy	0.76	Somewhat limited Too sandy	 0.76	Very limited Slope	1.00
	Slope	0.16	Slope	0.16	-	0.76
			22020		Content of large	1
	İ	İ		į	stones	İ
G	 		Gamarahan 32-24-2		 	
Sayner	Somewhat limited Too sandy	0.87	Somewhat limited Too sandy	 0.87	Very limited Slope	1.00
	Slope	0.16	Too sandy Slope	0.16	_	0.87
					Content of large	
	t contract the contract to the					
					stones	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	 Camp areas 		 Picnic areas 		Playgrounds	
	 Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>				
69C:						
Vilas	Somewhat limited Too sandy	0.87	Somewhat limited Too sandy	 0.87	Very limited Slope	1.00
	Slope	0.16	-	0.16	: -	0.87
					Gravel content	0.04
69E:	 		 		 	
Keweenaw	Very limited		Very limited		Very limited	
	Slope	1.00	-	1.00	: -	1.00
	Too sandy	0.76	Too sandy	0.76		0.76
	 		 		Content of large stones	0.01
Sayner	 Verv limited		 Very limited		 Very limited	
	Slope	1.00	_	1.00	: -	1.00
	Too sandy	0.87	Too sandy	0.87	Too sandy	0.87
	 	j I	 	j I	Content of large	0.05
					Gravel content	0.02
Vilas	 Very limited		 Very limited	 	 Very limited	
	Slope	1.00	-	1.00		1.00
	Too sandy	0.87 	Too sandy 	0.87 	Too sandy Gravel content	0.87
74B:	 		 		 	
Vilas	 Somewhat limited	i	 Somewhat limited	İ		
	Too sandy	0.87		0.87	!	0.87
		ĺ		ĺ	Slope	0.12
	[[Gravel content	0.06
74C:		į		į		
Vilas	Somewhat limited	1	Somewhat limited	1	Very limited	
	Too sandy	0.87	-	0.87		1.00
	Slope 	0.37	Slope 	0.37	Too sandy Gravel content	0.87
74D:				 	 	
Vilas	Very limited	ĺ	Very limited		Very limited	İ
	Slope	1.00	-	1.00		1.00
	Too sandy	0.87 	Too sandy 	0.87 	Too sandy Gravel content	0.87 0.06
100B:	 		 		 	
Menahga	 Verv limited	i	 Very limited		 Very limited	
3.	Too sandy	1.00		1.00	: -	1.00
	- 	į	- 	į	Slope	0.12
100C:	 	į	 		 	
Menahga			Somewhat limited	0.04	Very limited	1 00
	Slope 	0.04	Slope 	0.04	Slope	1.00
100D: Menahga	 Verv limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	 Camp areas 		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
127D:]		 	
Amery	 Very limited		 Very limited		 Very limited	1
-	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability	ļ	permeability	
	 		l I		Gravel content	0.05
					Content of large stones	
Rosholt	 Very limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
					Gravel content	0.03
	 				Content of large stones	0.01
					Cones	
127E: Amery	 Very limited		 Very limited	l I	 Very limited	
imer y	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	
					Gravel content	0.05
	 		 		Content of large stones	0.03
Rosholt	 Very limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
					Gravel content	0.03
	 				Content of large stones	0.01
156B:	 		 		 	
Magnor, very stony	 Very limited	İ	 Very limited	į	 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too stony Restricted	0.50	Too stony	0.50	Too stony	0.50
	permeability	0.43	Restricted permeability	0.43	Restricted permeability	0.43
	permeability		permeability		Content of large	0.01
	 -	į		į	stones	į
Magnor	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Restricted permeability	0.43	Restricted permeability	0.43	Restricted permeability	0.43
						İ
157B:						
Freeon, very stony	-	1 00	Very limited	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too stony	0.50	Too stony	0.50	Slope	0.50
	Restricted	0.43	Restricted	0.43	Too stony	0.50
	permeability	į	permeability	į	Restricted	0.43

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		 Picnic areas 		 Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157B: Freeon	 Very limited Depth to saturated zone Restricted permeability	 1.00 0.43	 Very limited Depth to saturated zone Restricted permeability	 1.00 0.43	 Very limited Depth to saturated zone Slope Restricted permeability Content of large	 1.00 0.50 0.43 0.01
157C: Freeon, very stony			 Very limited		stones	
	Depth to saturated zone Too stony Restricted permeability Slope	1.00 0.50 0.43 0.04	Depth to saturated zone Too stony Restricted permeability Slope	1.00 0.50 0.43 0.04	Depth to saturated zone Slope Too stony Restricted permeability	1.00 1.00 0.50 0.43
Freeon	 Very limited Depth to saturated zone Restricted permeability Slope	 1.00 0.43 0.04	 Very limited Depth to saturated zone Restricted permeability Slope	 1.00 0.43 0.04		 1.00 1.00 0.43 0.01
160A: Oesterle	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
182B: Padus	 Not limited 		 Not limited 	 	 Somewhat limited Slope Gravel content	 0.12 0.02
182C: Padus	 Somewhat limited Slope 	0.37	 Somewhat limited Slope	 0.37 	 Very limited Slope Gravel content	1.00
192A: Worcester	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Gravel content	1.00
193A: Minocqua	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
215B: Pence	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Content of large stones Gravel content	 0.12 0.01 0.01

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
215C: Pence	 Somewhat limited Slope 	 0.37 	 Somewhat limited Slope 	 0.37 	Very limited Slope Content of large stones Gravel content	 1.00 0.01 0.01
215D: Pence	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Content of large stones Gravel content	 1.00 0.01 0.01
315A: Rib	 Very limited Depth to saturated zone Ponding	1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
337A: Plover	Very limited Depth to saturated zone Restricted permeability	 1.00 0.60	 Very limited Depth to saturated zone Restricted permeability	 1.00 0.60	 Very limited Depth to saturated zone Restricted permeability	 1.00 0.60
368B: Mahtomedi	 Somewhat limited Too sandy 	0.72	 Somewhat limited Too sandy 	 0.72 	 Somewhat limited Too sandy Slope Gravel content	 0.72 0.50 0.04
Cress	 Not limited 		 Not limited 	 	 Somewhat limited Slope	0.50
368C: Mahtomedi	 Somewhat limited Too sandy Slope	0.72	 Somewhat limited Too sandy Slope	 0.72 0.04	:	 1.00 0.72 0.04
Cress	 Somewhat limited Slope	0.04	 Somewhat limited Slope	0.04	 Very limited Slope	1.00
368D: Mahtomedi	 Very limited Slope Too sandy	 1.00 0.72	 Very limited Slope Too sandy	 1.00 0.72	:	 1.00 0.72 0.04
Cress	 Very limited Slope	1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
371A: Croswell	 Somewhat limited Too sandy Depth to saturated zone	 0.87 0.39 	 Somewhat limited Too sandy Depth to saturated zone	 0.87 0.19 	:	 0.87 0.39 0.06

Table 16a.--Recreational Development--Continued

limiting features Not limited Not limited	 	Rating class and limiting features	Value	Rating class and limiting features	Value
Not limited	i I		 	 Somewhat limited	
	 	 Not limited		Slope	0.50
_		 	 	 Somewhat limited Slope Gravel content	 0.50 0.04
Somewhat limited Slope	!	 Somewhat limited Slope	:	 Very limited Slope	
Somewhat limited Slope	!	!			1.00
Very limited Slope		_			1.00
Very limited Slope	:	-	:	: -	1.00
Somewhat limited Too sandy	!	!	!	!	 0.72 0.12 0.04
Somewhat limited Too sandy Slope	!	!	0.72	Slope	 1.00 0.72 0.04
Very limited Slope Too sandy	1	-	1.00	Slope	 1.00 0.72 0.04
Very limited Too sandy	 1.00	 Very limited Too sandy	 1.00	 Very limited Too sandy	1.00
Very limited Too sandy Depth to saturated zone	 1.00 0.39 	 Very limited Too sandy Depth to saturated zone	 1.00 0.19 	 Very limited Too sandy Depth to saturated zone Gravel content	 1.00 0.39 0.06
Very limited Too sandy	 1.00 	 Very limited Too sandy 	 1.00 	 Very limited Too sandy Slope	 1.00 0.12
Very limited Depth to saturated zone	1.00	Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00 0.96
2 2 7 7 7	Slope Somewhat limited Slope Very limited Slope Very limited Slope Somewhat limited Too sandy Somewhat limited Too sandy Slope Very limited Slope Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy Very limited Too sandy	Slope 0.04 Somewhat limited 0.04 Very limited 1.00 Very limited 1.00 Somewhat limited 1.00 Somewhat limited 1.00 Somewhat limited 0.72 Somewhat limited 1.00 Too sandy 0.72 Slope 1.00 Very limited 1.00	Slope 0.04 Slope Somewhat limited Slope Somewhat limited Slope Very limited Slope Very limited Slope Very limited Slope Very limited Slope	Slope 0.04 Slope 0.04 Somewhat limited Slope 0.04 Slope 0.04 Slope 0.04 Slope 0.04 Slope 0.04 Slope 0.04 Slope 0.04 Slope 0.04 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Slope 0.72 Too sandy 0.72 Too sandy 0.72 Slope 0.04 Slope 0.04 Slope 0.04 Slope 1.00 Slope 1.00 Too sandy 0.72 Too sandy 0.73 Too sandy 0.74 Too sandy 0.75	Slope

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		 Picnic areas 		Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
399B:						
	 Very limited Too sandy 	1.00	 Very limited Too sandy	1.00	 Very limited Too sandy Slope	1.00
399C: Grayling	 Very limited Too sandy Slope	 1.00 0.04	 Very limited Too sandy Slope	 1.00 0.04	 Very limited Slope Too sandy	 1.00 1.00
399D: Grayling	 Very limited Too sandy Slope	 1.00 1.00	 Very limited Too sandy Slope	 1.00 1.00	 Very limited Slope Too sandy	 1.00 1.00
405A:		į				į
Lupton	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00
Cathro	 Very limited Depth to saturated zone Content of	 1.00 1.00	 Very limited Depth to saturated zone Content of	 1.00 1.00	 Very limited Depth to saturated zone Content of	 1.00 1.00
	organic matter Ponding	1.00	organic matter Ponding	1.00	organic matter Ponding	1.00
Tawas	 Very limited Depth to saturated zone Content of organic matter	 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter	 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter	 1.00 1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
406A: Loxley	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00
407A:	 		 		 	
Seelyeville	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00
Markey	 Very limited Depth to saturated zone Content of	 1.00 1.00	 Very limited Depth to saturated zone Content of	 1.00 1.00	 Very limited Depth to saturated zone Content of	 1.00 1.00
	organic matter	1.00	organic matter	1.00	organic matter Ponding	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	 Camp areas 		 Picnic areas 		 Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410A:	 		 		 	
Seelyeville	Very limited	į	Very limited	İ	Very limited	į
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of organic matter	1.00	Content of	1.00	Content of	1.00
	Ponding	1.00	organic matter Ponding	1.00	organic matter Ponding	1.00
Cathro	 		 Very limited		 Very limited	
Cathio	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter		organic matter		organic matter	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
412A:		į		İ		
Rifle			Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Tacoosh	Very limited	İ	Very limited	j	Very limited	į
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding 	1.00	Ponding 	1.00	Ponding 	1.00
415A:	İ	İ	į	İ	İ	İ
Greenwood	: -		Very limited	:	Very limited	
	Depth to	1.00	-	1.00		1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	saturated zone Content of	1.00
	organic matter		organic matter		organic matter	
	Ponding	1.00	Ponding	1.00		1.00
439B:	 		 		 	
Graycalm	Somewhat limited	İ	Somewhat limited	j	Somewhat limited	į
	Too sandy	0.30	Too sandy	0.30	Too sandy	0.30
	 		 		Slope	0.12
Menahga	Not limited	İ	Not limited	İ	Somewhat limited	İ
	 		 	 	Slope	0.12
439C:						
Graycalm	Somewhat limited	1	Somewhat limited	1	Very limited	
	Too sandy	0.30	:	0.30	: -	1.00
	Slope 	0.04	Slope 	0.04	Too sandy	0.30
Menahga	Somewhat limited	i	Somewhat limited	İ	 Very limited	İ
	Slope	0.04	Slope	0.04	Slope	1.00
439D:	 					
Graycalm	Very limited		 Very limited		 Very limited	İ
	Slope	1.00	Slope	1.00	Slope	1.00
	Too sandy	0.30	Too sandy	0.30	Too sandy	0.30
Menahga	 Verv limited		 Very limited	 	 Very limited	
· g	Slope	1.00	Slope	1.00	Slope	1.00
	į	İ	į -	į	į	j

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		 Playgrounds 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
						1
441C: Freeon	 Very limited		 Very limited		 Very limited	
rreeon	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.43	Restricted	0.43	Too stony	0.50
	permeability	i	permeability	i	Restricted	0.43
	Slope	0.37	Slope	0.37	permeability	į
Cathro	 Not rated 	 	 Not rated 	 	 Not rated 	
442C:						i
Haugen	Somewhat limited	İ	Somewhat limited	İ	Very limited	İ
	Restricted	0.60	Restricted	0.60	Slope	1.00
	permeability		permeability		Restricted	0.60
	Too stony	0.50	Too stony	0.50	permeability	
	Depth to	0.39	Depth to	0.19	Too stony	0.50
	saturated zone	ļ	saturated zone		Depth to	0.39
					saturated zone	
	 		 		Gravel content	0.05
Greenwood	 Very limited		 Very limited		 Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
443D:	 		 		 	
Amery	 Verv limited	l I	 Very limited		 Very limited	i
12.1017	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	:	0.21
	permeability	İ	permeability	İ	permeability	İ
		İ		İ	Gravel content	0.05
					Content of large	0.03
					stones	
Greenwood	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
461A:	 		 		 	l I
Bowstring	 Very limited		 Very limited		 Very limited	i
_	Depth to	1.00	Depth to	1.00		1.00
	saturated zone	j	saturated zone	į	saturated zone	į
	Flooding	1.00	Content of	1.00	Content of	1.00
	Content of	1.00	organic matter		organic matter	
	organic matter		Ponding	1.00	Flooding	1.00
	Ponding	1.00	Flooding	0.40	Ponding	1.00
484A:	 		 		 	
Greenwood	 Very limited		 Very limited	i	 Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
	ļ	Ţ.		ļ		Ţ
484A: Beseman	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
	saturated zone	[saturated zone		saturated zone	1
	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00
	Restricted permeability	0.21		0.21		0.21
40ED :		į				
495B: Karlsborg	 Somewhat limited		 Somewhat limited		 Somewhat limited	
	Depth to saturated zone	0.98	Restricted permeability	0.98	Depth to saturated zone	0.98
	Restricted	0.98	Too sandy	0.81	!	0.98
	permeability	į	Depth to	0.75	permeability	İ
	Too sandy 	0.81	saturated zone		Too sandy Slope	0.81
Grettum	 Somewhat limited		 Somewhat limited		 Somewhat limited	
	Too sandy	0.81	!	0.81	!	0.81
Perida	 - Somewhat limited	į	 Somewhat limited	į i	 Somewhat limited	į
TOTTUG	Too sandy	0.81		0.81	Too sandy	0.81
	 				Slope 	0.50
495C:	į	į		į		į
Karlsborg			Somewhat limited	1	Very limited	1 00
	Depth to saturated zone	0.98	Restricted permeability	0.98	Slope Depth to	1.00
	Restricted	0.98	Too sandy	0.81	· -	
	permeability		Depth to	0.75	!	0.98
	Too sandy	0.81	saturated zone	ĺ	permeability	Ì
	Slope 	0.04	Slope 	0.04	Too sandy	0.81
Grettum	Somewhat limited	İ	Somewhat limited	İ	Very limited	İ
	Too sandy	0.81	· -	0.81		1.00
	Slope 	0.04	Slope 	0.04	Too sandy	0.81
Perida	Somewhat limited	0.81	Somewhat limited		Very limited	
	Too sandy Slope	0.04	Too sandy Slope	0.81	Slope Too sandy	1.00
					100 Banay	
495D: Karlsborg	 Vorus limited		 Very limited		 Very limited	
Ralisbolg	Slope	1.00	: -	1.00		1.00
	Depth to	0.98	:	0.98	<u>-</u>	0.98
	saturated zone	İ	permeability	į	saturated zone	İ
	Restricted	0.98	· -	0.81	!	0.98
	permeability Too sandy	0.81	Depth to saturated zone	0.75 	permeability Too sandy	0.81
	į	į		į		
Grettum	: -		Very limited		Very limited	1 00
	Slope Too sandy	1.00 0.81	Slope Too sandy	1.00 0.81		1.00 0.81
	 		 Very limited		 	
Perida						
Perida	Slope	1.00	Slope	1.00	Very limited Slope	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
497A: Meenon	 Very limited Depth to saturated zone Restricted permeability Too sandy	 1.00 1.00 0.81	 Very limited Depth to saturated zone Restricted permeability Too sandy	 1.00 1.00 0.81	 Very limited Depth to saturated zone Restricted permeability Too sandy Gravel content	 1.00 1.00 0.81 0.06
515A: Manitowish	 Not limited 	 	 Not limited 	 	 Somewhat limited Content of large stones Gravel content	 0.01 0.01
521A: Dody	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.98	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.98	 Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.98
524E: Rock outcrop	 Not rated	<u> </u> 	 Not rated		 Not rated	į Į
Frogcreek	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21	 Very limited Depth to saturated zone Slope Too stony Restricted permeability	 1.00 1.00 0.50 0.21
Metonga	 Very limited Slope Too stony 	 1.00 0.47 	 Very limited Slope Too stony 	 1.00 0.47 	Very limited Slope Too stony Depth to bedrock Content of large stones	
542B:	 		 		 	
Haugen, very stony	Somewhat limited Restricted permeability Too stony Depth to saturated zone	 0.60 0.50 0.39 	Somewhat limited Restricted permeability Too stony Depth to saturated zone	 0.60 0.50 0.19 	Somewhat limited Restricted permeability Slope Too stony Depth to saturated zone Gravel content	 0.60 0.50 0.50 0.39
Haugen		 0.60 0.39 	 Restricted permeability Depth to saturated zone	 0.60 0.19 	Somewhat limited Restricted permeability Slope Depth to saturated zone Gravel content Content of large stones	 0.60 0.50 0.39 0.05 0.03

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
542C:						
Haugen, very stony	Somewhat limited Restricted permeability Too stony Depth to saturated zone Slope	 0.60 0.50 0.39 0.04	Somewhat limited Restricted permeability Too stony Depth to saturated zone Slope	 0.60 0.50 0.19 0.04	Very limited Slope Restricted permeability Too stony Depth to saturated zone Gravel content	 1.00 0.60 0.50 0.39
Haugen	Somewhat limited Restricted permeability Depth to saturated zone Slope	 0.60 0.39 0.04 	Somewhat limited Restricted permeability Depth to saturated zone Slope	 0.60 0.19 0.04 	Very limited Slope Restricted permeability Depth to saturated zone Gravel content Content of large stones	 1.00 0.60 0.39 0.05 0.03
543B: Anigon	 Not limited 		 Not limited 	 	 Somewhat limited Slope 	 0.50
543C2: Anigon	 Somewhat limited Slope 	0.04	 Somewhat limited Slope 	 0.04	 Very limited Slope	1.00
544F: Menahga	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	 1.00
Mahtomedi	 Very limited Slope Too sandy 	 1.00 0.72	 Very limited Slope Too sandy 	 1.00 0.72	 Very limited Slope Too sandy Gravel content	 1.00 0.72 0.04
555A: Fordum	 Very limited Depth to saturated zone Flooding Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	 Very limited Depth to saturated zone Flooding Ponding Gravel content	 1.00 1.00 1.00 0.04
574B: Sayner	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy Slope Gravel content Content of large stones	 0.87 0.12 0.02 0.01
574C: Sayner	 Somewhat limited Too sandy Slope 	 0.87 0.37 	 Somewhat limited Too sandy Slope 	 0.87 0.37 	 Very limited Slope Too sandy Gravel content Content of large stones	 1.00 0.87 0.02 0.01

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	 Rating class and limiting features	Value
574E: Sayner	 Very limited Slope Too sandy 	 1.00 0.87 	 Very limited Slope Too sandy 	 1.00 0.87 	 Very limited Slope Too sandy Gravel content Content of large stones	 1.00 0.87 0.02 0.01
579B: Parkfalls	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21 	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21 	Very limited Depth to saturated zone Too stony Restricted permeability Content of large stones	 1.00 0.50 0.21 0.01
600A: Haplosaprists	 Not rated		 Not rated		 Not rated	
Psammaquents	 Not rated 	 	 Not rated 	 	 Not rated 	
615B: Cress	 Not limited 		 Not limited	 	 Somewhat limited Slope	0.12
615C: Cress	 Somewhat limited Slope 	0.04	 Somewhat limited Slope	 0.04	 Very limited Slope 	1.00
615D: Cress	 Very limited Slope	1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
623A: Capitola	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50
624A: Ossmer	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
632A: Aftad	 Somewhat limited Depth to saturated zone	 0.39 	 Somewhat limited Depth to saturated zone	 0.19 	 Somewhat limited Depth to saturated zone	0.39
632B: Aftad	 Somewhat limited Depth to saturated zone	 0.39 	 Somewhat limited Depth to saturated zone	 0.19 	 Somewhat limited Slope Depth to saturated zone	 0.50 0.39

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		Picnic areas		Playgrounds 	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
632C: Aftad	 Somewhat limited Depth to saturated zone Slope	 0.39 0.04	saturated zone	 0.19 0.04	Depth to	 1.00 0.39
633F: Pence	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Content of large stones Gravel content	 1.00 0.01 0.01
Padus	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Gravel content	 1.00 0.02
648B: Sconsin	 Somewhat limited Depth to saturated zone	 0.98 	 Somewhat limited Depth to saturated zone		 Somewhat limited Depth to saturated zone Slope	0.98
670C: Keweenaw	 Somewhat limited Slope 	 0.37 	 Somewhat limited Slope 	 0.37 	 Very limited Slope Content of large stones	 1.00 0.01
Pence	 Somewhat limited Slope 	 0.37 	 Somewhat limited Slope 	 0.37 	 Very limited Slope Content of large stones Gravel content	j
670E: Keweenaw	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00	 Very limited Slope Content of large stones	 1.00 0.01
Pence	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Content of large stones Gravel content	 1.00 0.05 0.01
671B: Spoonerhill, stony	 Somewhat limited Depth to saturated zone Restricted permeability	 0.39 0.21 	 Somewhat limited Restricted permeability Depth to saturated zone	 0.21 0.19 	Depth to	 0.50 0.39 0.21 0.05 0.05

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	1	limiting features	<u> </u>
671B:	 		 		 	
Spoonerhill	Somewhat limited	į	Somewhat limited	į	Somewhat limited	į
	Depth to	0.39	Restricted	0.21	Slope	0.50
	saturated zone		permeability		Depth to	0.39
	Restricted	0.21	Depth to	0.19	saturated zone	
	permeability		saturated zone		Restricted	0.21
	 		 	1	permeability Gravel content	0.02
	 		 	1	Content of large	
					stones	
COOD.						
680B: Stanberry, stony	 Somewhat limited		 Somewhat limited		 Somewhat limited	
	Too stony	0.50	Too stony	0.50	Slope	0.50
	Depth to	0.39	Restricted	0.21	Too stony	0.50
	saturated zone		permeability		Depth to	0.39
	Restricted	0.21	Depth to	0.19	saturated zone	
	permeability		saturated zone	ļ	Restricted	0.21
					permeability	
	 		 		Content of large stones	
Pence, stony	 Somewhat limited		 Somewhat limited		 Somewhat limited	
rence, scony	Too stony	0.50	Too stony	0.50	Slope	0.50
					Too stony	0.50
		i		İ	Content of large	0.01
	j	į	j	į	stones	į
					Gravel content	0.01
683A:						
Tipler	Not limited		Not limited		Somewhat limited	
	 		 		Gravel content	0.02
706A:	 		 		 	
Winterfield	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Flooding 	1.00	Flooding 	0.40	Flooding 	1.00
Totagatic	Very limited	i	Very limited	İ	Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Flooding	1.00	Ponding	1.00	-	1.00
	Ponding 	1.00	Flooding 	0.40	Ponding 	1.00
724A:						į
Rib	:		Very limited	1	Very limited	
	Depth to	1.00		1.00	Depth to	1.00
	saturated zone Ponding	1.00	saturated zone Ponding	1.00	saturated zone Ponding	1.00
Book outgron	Not rated	į	Not rated	İ	Not rated	į
Rock outcrop			Not rated 		Not rated 	
726B:	 Company					
Sissabagama		0 01	Somewhat limited	0.81	Somewhat limited	0 01
	Too sandy	0.81	Too sandy	 U.81	Too sandy Slope	0.81
	I		I		I	

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
733A:						1
Wozny	Very limited	1	Very limited	1 00	Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	1 00	saturated zone	1.00
	Ponding Too stony	1.00	!	1.00	Ponding	0.50
	-	0.50	Too stony	0.50	Too stony	
	Restricted permeability	0.21	Restricted permeability	0.21	Restricted permeability	0.21
	i	İ	İ	İ	į -	i
771A: Lenroot	 Comprehent limited		Somewhat limited		 Somewhat limited	
Tellioc	Too sandy	0.72	Too sandy	0.72	Too sandy	0.72
	Depth to	0.72	Depth to	0.72	Depth to	0.72
	saturated zone	10.33	saturated zone	10.13	saturated zone	10.39
	saturated zone	1	saturated zone	1	Gravel content	0.06
	 	l	 	l	Graver content	0.06
827A:		į	İ	į		i
Scoba	Somewhat limited		Somewhat limited		Somewhat limited	
	Depth to	0.39	Depth to	0.19	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
		ļ		ļ	Gravel content	0.04
853C:	 		 		 	
Frogcreek	 Verv limited	i	 Very limited	i	 Very limited	1
3	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.21	Restricted	0.21	Too stony	0.50
	permeability	i	permeability	i	Restricted	0.21
		İ		İ	permeability	
and an artic			 		 	
Stinnett	· -	1	Very limited	1	Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability	l	permeability	l	permeability	i i
Wozny	 Very limited	į	 Very limited	į	 Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability	ļ	permeability	ļ	permeability	
856B:	 	 	 	 	 	1
Stinnett	 Very limited		 Very limited		 Very limited	1
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	İ
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	İ

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas 		Picnic areas		 Playgrounds 	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
857B: Frogcreek	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21	 Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21	 Very limited Depth to saturated zone Slope Too stony Restricted permeability	 1.00 0.50 0.50 0.21
857C: Frogcreek	 Very limited Depth to saturated zone Too stony Restricted permeability Slope	 1.00 0.50 0.21 0.16	 Very limited Depth to saturated zone Too stony Restricted permeability Slope	 1.00 0.50 0.21 0.16	 Very limited Depth to saturated zone Slope Too stony Restricted permeability	 1.00 1.00 0.50 0.21
873B: Stanberry	Somewhat limited Too stony Depth to saturated zone Restricted permeability	 0.50 0.39 0.21 	Somewhat limited Too stony Restricted permeability Depth to saturated zone	 0.50 0.21 0.19 	Somewhat limited Slope Too stony Depth to saturated zone Restricted permeability Content of large stones	 0.50 0.50 0.39 0.21
873C: Stanberry	Somewhat limited Too stony Depth to saturated zone Slope Restricted permeability	 0.50 0.39 0.37 0.21	Somewhat limited Too stony Slope Restricted permeability Depth to saturated zone	 0.50 0.37 0.21 0.19		 1.00 0.50 0.39 0.21
873D: Stanberry		 1.00 0.50 0.39 0.21		 1.00 0.50 0.21 0.19	Very limited Slope Too stony Depth to saturated zone Restricted permeability Content of large stones	 1.00 0.50 0.39 0.21 0.01
905A: Cublake	 Somewhat limited Too sandy 	 0.50 	 Somewhat limited Too sandy 	 0.50 	 Somewhat limited Too sandy Gravel content	 0.50 0.06
926A: Flink	 Very limited Depth to saturated zone Too sandy	 1.00 0.50	 Very limited Depth to saturated zone Too sandy	 1.00 0.50	 Very limited Depth to saturated zone Too sandy	 1.00 0.50

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		 Picnic areas 		Playgrounds 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u>i</u>	limiting features	<u>i</u>
943D:			 	 	 	l I
Stanberry	 Very limited	i	 Very limited	İ	 Very limited	ì
	Slope	1.00	Slope	1.00	Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Depth to	0.39	!	0.21	Depth to	0.39
	saturated zone		permeability		saturated zone	
	Restricted	0.21	Depth to	0.19		0.21
	permeability		saturated zone	l I	permeability Content of large	0 01
					stones	
Greenwood	Very limited Depth to	1.00	Very limited Depth to	1.00	Very limited	1.00
	saturated zone	1	saturated zone	1	Depth to saturated zone	1
	Ponding	1.00	!	1.00	!	1.00
48A:	Ì	İ		ĺ	İ	İ
Billyboy		1	Somewhat limited	!	Somewhat limited	1
	Depth to	0.98	Depth to	0.75	-	0.98
	saturated zone		saturated zone	 	saturated zone	I
70C:		1				
Keweenaw	Somewhat limited	İ	Somewhat limited		Very limited	İ
	Slope	0.37	Slope	0.37	Slope	1.00
					Content of large	0.01
			 	l I	stones	I
Pence	Somewhat limited	i	 Somewhat limited	l I	 Very limited	ì
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Slope	0.37	Slope	0.37	Too stony	0.50
					Content of large	0.01
					stones	
			 	l I	Gravel content	0.01
Greenwood	Not rated		 Not rated		 Not rated	
70E: Keweenaw	 Verv limited		 Very limited	l I	 Very limited	1
	Slope	1.00	Slope	1.00	Slope	1.00
		i			Content of large	
	İ	į	İ	İ	stones	İ
D	77 1::				 	
Pence	Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
					Content of large	0.01
		i		İ	stones	i
	İ	İ			Gravel content	0.01
Greenwood	Not rated		 Not rated	 	 Not rated	
GI eeliwood			Not lated		NOC Taced	
.070C:				ļ		ļ
Fremstadt			Somewhat limited		Very limited	
	Slope	0.16	Slope	0.16	Slope	1.00
			 	 	Gravel content	0.43
Cress	Somewhat limited	i	 Somewhat limited		 Very limited	i
		1		0.04		1.00
	Slope	0.04	Slope	0.04	Slope	11.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1070D: Fremstadt	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00	 Very limited Slope Gravel content	 1.00 0.43
Cress	 Very limited Slope	1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
1080B: Spoonerhill	 Somewhat limited Depth to saturated zone Restricted permeability	 0.39 0.21 	 Somewhat limited Restricted permeability Depth to saturated zone	 0.21 0.19 	Somewhat limited Slope Depth to saturated zone Restricted permeability Gravel content Content of large stones	 0.50 0.39 0.21 0.02 0.01
Spoonerhill, stony	Somewhat limited Depth to saturated zone Restricted permeability	 0.39 0.21 	Somewhat limited Restricted permeability Depth to saturated zone	 0.21 0.19 	Somewhat limited Slope Depth to saturated zone Restricted permeability Content of large stones Gravel content	 0.50 0.39 0.21 0.05
Cress	 Not limited 		 Not limited 		 Somewhat limited Slope	 0.12
16526						
1653C: Stanberry	Somewhat limited Too stony Depth to saturated zone Restricted permeability Slope	 0.50 0.39 0.21 0.04	Somewhat limited Too stony Restricted permeability Depth to saturated zone Slope	 0.50 0.21 0.19 0.04	Very limited Slope Too stony Depth to saturated zone Restricted permeability Content of large stones	 1.00 0.50 0.39 0.21
Parkfalls		 1.00 0.50 0.21 	Very limited Depth to saturated zone Too stony Restricted permeability	 1.00 0.50 0.21 	Very limited Depth to saturated zone Too stony Restricted permeability Content of large stones	 1.00 0.50 0.21 0.01
Wozny	Very limited Depth to saturated zone Ponding Too stony Restricted permeability	 1.00 1.00 0.50 0.21	Very limited Depth to saturated zone Ponding Too stony Restricted permeability	 1.00 1.00 0.50 0.21	Very limited Depth to saturated zone Ponding Too stony Restricted permeability	 1.00 1.00 0.50 0.21

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
0015						
2015: Pits	 Not rated 	 	 Not rated 	 	 Not rated 	
2050:	İ	İ		i		i
Landfill	Not rated 		Not rated 		Not rated 	
3011A:	į	į		į	į	į
Barronett	· -		Very limited		Very limited	
	Depth to	1.00		1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Restricted	0.21	!	0.21		0.21
	permeability		permeability		permeability	1
3125A:		İ		İ		į
Meehan	Very limited		Very limited		Very limited	
	Depth to	1.00		1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
3126A:		İ				
Wurtsmith	Somewhat limited		Somewhat limited		Somewhat limited	
	Too sandy	0.60	Too sandy	0.60	Too sandy	0.60
	Depth to	0.39	Depth to	0.19	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
			l	l i	Gravel content	0.06
3276A:			 		 	
Au Gres	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	1
3312B:	 		 		 	
Glendenning, very		i		i		i
stony	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability	!	permeability	!	permeability	
		1		1	Gravel content	0.05
			 		Content of large stones	0.03
	į	į		į		į
Glendenning			Very limited		Very limited	
	Depth to	1.00		1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Restricted	0.21	!	0.21	!	0.21
	permeability	1	permeability	1	permeability Gravel content	0.06
	 	1	1 		Content of large	
					stones	
3336A:						
Fenander	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	: -	1.00	: -	1.00
	: -	i	saturated zone	i	saturated zone	i
	saturated zone		Dataracea rone	1	Baculaced Zone	
	saturated zone Ponding	1.00	Ponding	1.00	Ponding	1.00
	!	 1.00 0.21	!	1.00	!	1.00

Table 16a.--Recreational Development--Continued

Map symbol and soil name	Camp areas		Picnic areas		Playgrounds	
	Rating class and	Value	Rating class and	Value	Rating class and	Valu
	limiting features	<u>i</u>	limiting features	<u> </u>	limiting features	<u>i </u>
3403A:	 		 	 	 	
Loxley	 Verv limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ	saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter		organic matter		organic matter	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Beseman	 Verv limited		 Very limited	 	 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	
Dawson	 Very limited		 Very limited	 	 Very limited	
242011	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	İ	İ	İ	ĺ		ĺ
424C:						
Frogcreek	! -		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too stony	0.50	Too stony	0.50	Slope	1.00
	Restricted	0.30	Restricted	0.21	Too stony	0.50
	permeability		permeability		Restricted	0.21
		i			permeability	İ
Magroc	! -		Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Too stony	0.50	Too stony	0.50	Too stony	0.50
	100 bcony				Content of large	
		i		i	stones	
		i	İ		Gravel content	0.02
Stinnett	Very limited Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Too stony	0.50	Too stony	0.50	!	0.50
	Restricted	0.21	Restricted	0.21	Restricted	0.21
	permeability		permeability		permeability	İ
Rock outcrop	 Not rated		 Not rated		 Not rated	
3446A:	 		 	 	 	
Newson	 Very limited		 Very limited		 Very limited	
	Depth to	1.00		1.00	_	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
448B:	 		 	 	 	
Grettum	 Somewhat limited		 Somewhat limited	 	 Somewhat limited	1
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
					Slope	0.12
	i	i	I	i	. -	i

Table 16a.--Recreational Development--Continued

Map symbol	Camp areas		Picnic areas		Playgrounds	
and soil name			 			
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	
3448C:	 		 		 	
Grettum	Somewhat limited		Somewhat limited		Very limited	
	Too sandy	0.81	Too sandy	0.81	Slope	1.00
	Slope	0.04	Slope	0.04	Too sandy	0.81
3516A:	 		 		 	
Slimlake	Not limited		Not limited		Not limited	
3629B:	 				 	
Perida	Somewhat limited	İ	Somewhat limited	İ	Somewhat limited	Ì
	Too sandy	0.81	Too sandy	0.81	Too sandy	0.81
M-W:	 					
Miscellaneous water	Not rated	į	Not rated	į	Not rated	į
W:	[[
Water	Not rated	1	Not rated	1	Not rated	

Table 16b.--Recreational Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Valu
BA:	 		 		 	l I
Totagatic	 Very limited		 Very limited	İ	 Very limited	i
•	Depth to	1.00	-	1.00	<u>-</u>	1.00
	saturated zone	i	saturated zone	İ	Depth to	1.00
	Ponding	1.00	Ponding	1.00	saturated zone	İ
	Flooding	0.40	Flooding	0.40	Ponding	1.00
Bowstring	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Content of	1.00
	Content of	1.00	Content of	1.00	organic matter	
	organic matter		organic matter		Depth to	1.00
	Ponding	1.00		1.00	saturated zone	
	Flooding	0.40	Flooding	0.40	Ponding	1.00
Ausable	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Ponding	1.00	Ponding	1.00	saturated zone	
	Flooding	0.40	Flooding	0.40	Ponding	1.00
2A:						
Comstock	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
4A:						
Poskin	Very limited		Very limited		Very limited	
	Depth to	1.00	-	1.00		1.00
	saturated zone		saturated zone		saturated zone	
7A:						
Scott Lake	Not limited		Not limited		Somewhat limited	
]		Droughty	0.01
8B:						
Haugen, very stony	Somewhat limited		Somewhat limited		Somewhat limited	
	Too stony	0.50	Too stony	0.50	-	0.19
				!	saturated zone	
	 				Content of large stones	0.03
				İ		İ
Haugen	Not limited		Not limited		Somewhat limited	
				!	Depth to	0.19
				ļ	saturated zone	
	 				Content of large stones	0.03
Dankalk	 		Gamanhati 34miliani		Gamarika k. 32 milia a	
Rosholt, very stony		!	Somewhat limited	:	Somewhat limited	
	Too stony	0.50	Too stony	0.50	Droughty	0.02
	 	I	 	1	Content of large stones	10.01
	1	1	I	1	SCOHES	1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	 Paths and trail 	s	Off-road motorcycle trai	ls	Golf fairways	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28B: Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty	0.01
28C: Haugen, very stony	•	 0.50 	 Somewhat limited Too stony 	 0.50 	Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.03
Haugen	 Not limited 	 	 Not limited 	 	Somewhat limited Depth to saturated zone Slope Content of large stones	0.04
Rosholt, very stony	•	 0.50 	 Somewhat limited Too stony 	 0.50 	Somewhat limited Slope Droughty Content of large stones	 0.04 0.02 0.01
Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Droughty	0.04
33B: Chetek	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Content of large stones	0.61
33C: Chetek	 Not limited 	 	 Not limited 	 		 0.61 0.04 0.01
38A: Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty	0.01
38B: Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty	0.01
38C: Rosholt	 Not limited -	 	 Not limited 	 	 Somewhat limited Slope Droughty	0.04
38D: Rosholt	 Somewhat limited Slope 	 0.02 	 Not limited - 	 	 Very limited Slope Droughty	1.00

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trai	ls	Golf fairways	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	<u> </u>
42D: Amery	 Somewhat limited Too stony Slope	 0.50 0.02	 Somewhat limited Too stony 	 0.50 	 Very limited Slope Content of large stones	 1.00 0.03
43B: Antigo	 Not limited 	 	 Not limited 	 	 Not limited 	
43C: Antigo	 Very limited Water erosion	 1.00	 Very limited Water erosion	 1.00	 Somewhat limited Slope	0.37
43D: Antigo	 Very limited Water erosion Slope	 1.00 0.92	 Very limited Water erosion	 1.00	 Very limited Slope 	
48A: Brill	 Somewhat limited Depth to saturated zone	 0.44 	 Somewhat limited Depth to saturated zone	 0.44	 Somewhat limited Depth to saturated zone	 0.75
63A: Crystal Lake	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.19
63B: Crystal Lake	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.19
63C: Crystal Lake	 Very limited Water erosion	 1.00 	 Very limited Water erosion	 1.00 	 Somewhat limited Depth to saturated zone Slope	 0.19 0.04
63E: Crystal Lake	 Very limited Water erosion Slope	 1.00 1.00	 Very limited Water erosion Slope	 1.00 0.08	 Very limited Slope 	 1.00
64A: Totagatic	 Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	 Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	 Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00
Winterfield	 Very limited Depth to saturated zone Too sandy Flooding	 1.00 0.79 0.40	 Very limited Depth to saturated zone Too sandy Flooding	 1.00 0.79 0.40	•	 1.00 1.00 0.50

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69B: Keweenaw	 Somewhat limited Too sandy 	 0.76 	 Somewhat limited Too sandy 	 0.76 	 Somewhat limited Droughty Content of large stones	 0.06 0.01
Sayner	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Content of large stones	 0.94 0.05
Vilas	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty 	0.42
69C: Keweenaw	 Somewhat limited Too sandy 	 0.76 	 Somewhat limited Too sandy 	 0.76 	Somewhat limited Slope Droughty Content of large stones	 0.16 0.06 0.01
Sayner	!	 0.87 	 Somewhat limited Too sandy 	 0.87 		 0.94 0.16 0.05
Vilas	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Slope	0.42
69E: Keweenaw	 Very limited Slope Too sandy 	 1.00 0.76 	 Somewhat limited Too sandy Slope 	 0.76 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.06 0.01
Sayner	 Very limited Slope Too sandy 	 1.00 0.87 		 0.87 0.22 	Very limited Slope Droughty Content of large stones	 1.00 0.94 0.05
Vilas	 Very limited Slope Too sandy	 1.00 0.87	· -	 0.87 0.22	:	 1.00 0.42
74B: Vilas	 Somewhat limited Too sandy 	 0.87	 Somewhat limited Too sandy 	 0.87	 Somewhat limited Droughty 	0.42
74C: Vilas	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Slope	 0.42 0.37
74D: Vilas	 Somewhat limited Slope Too sandy	 0.92 0.87	 Somewhat limited Too sandy 	 0.87 	 Very limited Slope Droughty	 1.00 0.42

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	.s	Off-road motorcycle trai	ls	Golf fairways 		
	Rating class and limiting features	Value	Rating class and limiting features		Rating class and limiting features	Value	
100B: Menahga	 Very limited Too sandy 	 1.00	 Very limited Too sandy 	 1.00	 Somewhat limited Droughty Too sandy	 0.93 0.50	
100C: Menahga	 Not limited 		 Not limited 	 	 Somewhat limited Droughty Slope	 0.51 0.04	
100D: Menahga	 Somewhat limited Slope 	0.68	 Not limited 		 Very limited Slope Droughty	 1.00 0.51	
127D: Amery	 Somewhat limited Too stony Slope	0.50	 Somewhat limited Too stony 	 0.50 	 Very limited Slope Content of large stones	 1.00 0.03	
Rosholt	 Somewhat limited Too stony Slope 	 0.50 0.02 	 Somewhat limited Too stony 	 0.50 	 Very limited Slope Droughty Content of large stones	 1.00 0.02 0.01	
127E: Amery	 Very limited Slope Too stony	 1.00 0.50	:	 0.56 0.50	:	 1.00 0.03	
Rosholt	 Very limited Slope Too stony 	 1.00 0.50 	 Somewhat limited Slope Too stony 	 0.56 0.50 	:	 1.00 0.02 0.01	
156B: Magnor, very stony	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone Too stony	 1.00 0.50	saturated zone	 1.00 0.01	
Magnor	 Very limited Depth to saturated zone 	1.00	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	
157B: Freeon, very stony	 Very limited Depth to saturated zone Too stony	1.00	saturated zone	 1.00 0.50	 Very limited Depth to saturated zone		
Freeon	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Content of large stones	 1.00 0.01	

Table 16b.--Recreational Development--Continued

Map symbol and soil name	 Paths and trail 	s	Off-road motorcycle trai	ls	Golf fairways	
		Value		Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	1
157C:	 	 	 			
Freeon, very stony	Very limited	į	Very limited	İ	Very limited	į
	Depth to	1.00	-	1.00	· -	1.00
	saturated zone		saturated zone		saturated zone	
	Water erosion Too stony	1.00 0.50	!	1.00 0.50	Slope	0.04
						İ
Freeon	Very limited	İ	Very limited		Very limited	Ì
	Depth to	1.00	-	1.00	· -	1.00
	saturated zone Water erosion		saturated zone Water erosion	1 00	saturated zone	0.04
	water erosion	1.00	water erosion	1.00	Slope Content of large	
		i		İ	stones	
	İ	İ		ĺ	İ	Ì
160A:						!
Oesterle	Very limited Depth to	 1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
		i		j		İ
182B:	[1
Padus	Not limited		Not limited		Not limited	1
182C:	 		 	l I	 	
Padus	 Not limited	i	 Not limited	İ	Somewhat limited	i
	İ	İ	İ	İ	Slope	0.37
		!				ļ
192A: Worcester	 Very limited		 Very limited	l I	 Very limited	l I
MOICEBLEI	Depth to	1.00	-	1.00	· -	1.00
	saturated zone		saturated zone		saturated zone	İ
	!	!				ļ
193A: Minocqua	 		 		 	
MINOCQUA	Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
0.1.5-						ļ
215B: Pence	 Not limited		 Not limited	l I	 Somewhat limited	l I
rence	 	i	 		Droughty	0.30
		i		İ	Content of large	
				ļ	stones	ļ
2150.	 		l I		l	
215C: Pence	Not limited	 	 Not limited	 	 Somewhat limited	
1000		i		İ	Slope	0.37
	İ	İ	İ	İ	Droughty	0.30
					Content of large	0.01
	 		 		stones	
215D:	 		[[
Pence	Somewhat limited	į	 Not limited	j	 Very limited	j
	Slope	0.92			Slope	1.00
					Droughty	0.30
	 		 		Content of large stones	0.01
	I	1	I	I	Promes	1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	Off-road motorcycle trai	ls	Golf fairways 		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
315A: Rib	 Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	 1.00 1.00	saturated zone	 1.00 1.00
337A: Plover	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	Very limited Depth to saturated zone	 1.00
368B: Mahtomedi	 Somewhat limited Too sandy	 0.72	 Somewhat limited Too sandy	 0.72	 Very limited Droughty	1.00
Cress	 Not limited 	 	 Not limited	 	 Somewhat limited Droughty	0.13
368C: Mahtomedi	 Somewhat limited Too sandy 	 0.72	 Somewhat limited Too sandy 	 0.72	 Very limited Droughty Slope	 1.00 0.04
Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Slope	 0.13 0.04
368D: Mahtomedi	 Somewhat limited Too sandy Slope	 0.72 0.50	 Somewhat limited Too sandy	 0.72	 Very limited Slope Droughty	 1.00 1.00
Cress	 Somewhat limited Slope 	 0.50 	 Not limited 	 	 Very limited Slope Droughty 	 1.00 0.13
371A: Croswell	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Depth to saturated zone	 0.54 0.19
380B: Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty	0.13
Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty 	 0.01
380C: Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Slope	 0.13 0.04
Rosholt	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Droughty 	 0.04 0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trails		Golf fairways 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
380D: Cress	 Somewhat limited Slope 	 0.68	 Not limited 	 	 Very limited Slope Droughty	 1.00 0.13
Rosholt	 Somewhat limited Slope 	 0.68 	 Not limited 	 	 Very limited Slope Droughty	 1.00 0.01
383B: Mahtomedi	 Somewhat limited Too sandy 	 0.72	 Somewhat limited Too sandy 	 0.72	 Very limited Droughty 	 1.00
383C: Mahtomedi	 Somewhat limited Too sandy	 0.72	 Somewhat limited Too sandy	0.72	 Very limited Droughty Slope	1.00
383D: Mahtomedi	 Somewhat limited Too sandy Slope	 0.72 0.68	 Somewhat limited Too sandy 	 0.72 	 Very limited Slope Droughty	 1.00 1.00
396B: Friendship	 Very limited Too sandy	 1.00	 Very limited Too sandy	 1.00	Somewhat limited Droughty Too sandy	 0.91 0.50
Wurtsmith	 Very limited Too sandy 	 1.00 	 Very limited Too sandy 	 1.00 	Somewhat limited Droughty Too sandy Depth to saturated zone	 0.87 0.50 0.19
Grayling	 Very limited Too sandy 	 1.00 	 Very limited Too sandy 	 1.00 	 Very limited Droughty Too sandy	 1.00 0.50
397A: Perchlake	 Very limited Depth to saturated zone Too sandy	 1.00 0.96	 Very limited Depth to saturated zone Too sandy	 1.00 0.96	 Very limited Depth to saturated zone Droughty	 1.00 0.36
399B: Grayling	 Very limited Too sandy 	 1.00 	 Very limited Too sandy 	 1.00 	 Very limited Droughty Too sandy	 1.00 0.50
399C: Grayling	 Very limited Too sandy 	 1.00 	 Very limited Too sandy 	 1.00 	 Very limited Droughty Too sandy Slope	 1.00 0.50 0.04
399D: Grayling	 Very limited Too sandy Slope	 1.00 0.68	 Very limited Too sandy 	 1.00 	 Very limited Droughty Slope Too sandy	 1.00 1.00 0.50

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trai	ls	Golf fairways 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u> 	limiting features	<u> </u>	limiting features	<u> </u>
405A:	 		 		 	i
Lupton	 Very limited	i	 Very limited	i	 Very limited	i
-	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	İ	saturated zone	į	organic matter	i
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
		ļ		ļ		!
Cathro	Very limited	1	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	1 00	saturated zone	1 00	organic matter	1 00
	Content of organic matter	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
					101141119	
Tawas	 Very limited	İ	 Very limited	i	 Very limited	i
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone	İ	saturated zone	į	organic matter	i
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
406A:		ļ		ļ		!
Loxley	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	organic matter	1.00
	organic matter	1	organic matter	1	Depth to saturated zone	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
407A:		į		į		į
Seelyeville	Very limited	ĺ	Very limited	ĺ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter		organic matter		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Markey	 Very limited	1	 Very limited	l I	 Very limited	1
Markey	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Content of	1.00	Content of	1.00	Depth to	1.00
	organic matter	İ	organic matter	į	saturated zone	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
410A:						!
Seelyeville			Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of	1.00
	Saturated zone Content of	1.00	Saturated zone Content of	1.00	organic matter Depth to	1.00
	organic matter	1.00	organic matter	1.00	saturated zone	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
						i
Cathro	 Very limited	İ	 Very limited	İ	 Very limited	i
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
				1		
	Content of	1.00	Content of	1.00	Depth to	1.00
	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00	Depth to saturated zone Ponding	1.00 1.00

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412A: Rifle	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
Tacoosh	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
415A: Greenwood	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00
439B: Graycalm	 Somewhat limited Too sandy	0.30	 Somewhat limited Too sandy	 0.30	 Somewhat limited Droughty	0.29
Menahga	 Not limited 		 Not limited 		 Somewhat limited Droughty	0.49
439C: Graycalm	 Somewhat limited Too sandy 	0.30	 Somewhat limited Too sandy 	 0.30	 Somewhat limited Droughty Slope	0.29
Menahga	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Slope	0.49
439D: Graycalm	 Somewhat limited Slope Too sandy	0.68	 Somewhat limited Too sandy	 0.30	 Very limited Slope Droughty	1.00
Menahga	 Somewhat limited Slope 	 0.68 	 Not limited 	 	 Very limited Slope Droughty	1.00
441C: Freeon	 Very limited Depth to saturated zone Water erosion Too stony		saturated zone Water erosion	 1.00 1.00 0.50	 Very limited Depth to saturated zone Slope	 1.00 0.37
Cathro	 Not rated 	 	 Not rated 	 	 Not rated 	
442C: Haugen	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.03

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trails		Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
442C: Greenwood	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
443D:	 				 	
Amery	 Very limited Slope Too stony	 1.00 0.50 	Somewhat limited Too stony	 0.50 	 Very limited Slope Content of large stones	1.00
Greenwood	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
461A:						
Bowstring	Very limited Depth to saturated zone Content of	 1.00 1.00	Very limited Depth to saturated zone Content of	 1.00 1.00	Content of	 1.00 1.00
	organic matter Ponding Flooding	 1.00 0.40	organic matter Ponding Flooding	 1.00 0.40	!	1.00 1.00
484A:						
Greenwood	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
Beseman	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Content of organic matter	 1.00
	Content of organic matter Ponding 	1.00 1.00 	Content of organic matter Ponding 	1.00 1.00 	Depth to saturated zone Ponding 	1.00 1.00
495B: Karlsborg	 Somewhat limited Too sandy Depth to saturated zone	 0.81 0.44	 Somewhat limited Too sandy Depth to saturated zone	 0.81 0.44	 Somewhat limited Depth to saturated zone Droughty	 0.75 0.26
Grettum	 Somewhat limited Too sandy	 0.81	 Somewhat limited Too sandy	 0.81	 Somewhat limited Droughty	0.61
Perida	 Somewhat limited Too sandy 	 0.81	 Somewhat limited Too sandy 	 0.81	 Somewhat limited Droughty 	0.44
495C: Karlsborg	 Somewhat limited Too sandy Depth to saturated zone	 0.81 0.44 	 Somewhat limited Too sandy Depth to saturated zone	:	 Somewhat limited Depth to saturated zone Droughty Slope	 0.75 0.26 0.04

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
495C:	 		 		 	
Grettum	Somewhat limited Too sandy	0.81	Somewhat limited Too sandy	0.81	Somewhat limited Droughty Slope	0.61
Perida	 Somewhat limited Too sandy 	 0.81 	 Somewhat limited Too sandy	0.81	 Somewhat limited Droughty Slope	0.44
495D:			 		 	
Karlsborg	Somewhat limited Too sandy Slope Depth to saturated zone	 0.81 0.68 0.44	Depth to	 0.81 0.44 	<u>-</u>	 1.00 0.75 0.26
Grettum	 Somewhat limited Too sandy Slope	 0.81 0.68	 Somewhat limited Too sandy 	 0.81	 Very limited Slope Droughty	 1.00 0.61
Perida	 Somewhat limited Too sandy Slope	 0.81 0.68	 Somewhat limited Too sandy 	 0.81 	 Very limited Slope Droughty	 1.00 0.44
497A:						
Meenon	Very limited Depth to saturated zone Too sandy 	 1.00 0.81	saturated zone	 1.00 0.81	saturated zone	1.00
515A: Manitowish	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Content of large stones	0.17
521A:						
Dody	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
524E:	 		 		 	
Rock outcrop	Not rated		Not rated 		Not rated	
Frogcreek	Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone	1.00
Metonga	 Very limited Water erosion Slope Too stony	 1.00 1.00 0.47	 Very limited Water erosion Slope Too stony	 1.00 0.56 0.47	 Very limited Slope Depth to bedrock Content of large stones	1

Table 16b.--Recreational Development--Continued

Map symbol and soil name	 Paths and trail 	s	 Off-road motorcycle trails		 Golf fairways 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
542B: Haugen, very stony		 0.50	 Somewhat limited Too stony	 0.50	 Somewhat limited Depth to	
_	 		 	 	saturated zone Content of large stones	0.03
Haugen		 	Not limited	 	Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.03
542C: Haugen, very stony	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.03
Haugen	 Not limited 	 	 Not limited 	 	Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.03
543B: Anigon	 Not limited 		 Not limited 	 	 Not limited 	
543C2: Anigon	 Very limited Water erosion 	 1.00	 Very limited Water erosion 	 1.00	 Somewhat limited Slope 	 0.04
544F: Menahga	 Very limited Slope	1.00	 Somewhat limited Slope	 0.96 	 Very limited Slope Droughty	 1.00 0.51
Mahtomedi	 Very limited Slope Too sandy 	 1.00 0.72	 Somewhat limited Slope Too sandy	0.96	 Very limited Slope Droughty 	 1.00 1.00
555A: Fordum	 Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	 Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	Depth to	 1.00 1.00 1.00
574B: Sayner	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Content of large stones	 0.94 0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
574C: Sayner	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Too sandy 	 0.87 	 Somewhat limited Droughty Slope Content of large stones	 0.94 0.37 0.01
574E: Sayner	 Very limited Slope Too sandy 	 1.00 0.87 	 Somewhat limited Too sandy Slope 	 0.87 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.94 0.01
579B: Parkfalls	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone Content of large stones	 1.00 0.01
600A: Haplosaprists	 Not rated		 Not rated		 Not rated	
Psammaquents	 Not rated 	 	 Not rated 	 	 Not rated 	
615B: Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty	0.13
615C: Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Slope	 0.13 0.04
615D: Cress	 Somewhat limited Slope 	 0.68	 Not limited 	 	 Very limited Slope Droughty	 1.00 0.13
623A: Capitola	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding	 1.00 1.00
624A: Ossmer	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
632A: Aftad	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.19
632B: Aftad	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.19

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	 Golf fairways 	ı
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
632C: Aftad	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone Slope	0.19
633F: Pence	 Very limited Slope 	 1.00 	 Somewhat limited Slope 	 0.96 	 Very limited Slope Droughty Content of large stones	 1.00 0.30 0.01
Padus	 Very limited Slope 	 1.00	 Somewhat limited Slope 	 0.96	 Very limited Slope 	1.00
648B: Sconsin	 Somewhat limited Depth to saturated zone	 0.44 	 Somewhat limited Depth to saturated zone	 0.44 	 Somewhat limited Depth to saturated zone	 0.75
670C: Keweenaw	 Not limited 	 	 Not limited 	 	Somewhat limited Slope Droughty Content of large stones	 0.37 0.05 0.01
Pence	 Not limited -	 	 Not limited 	 		 0.37 0.30 0.05
670E: Keweenaw	 Very limited Slope 	 1.00 	 Somewhat limited Slope 	 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.05 0.01
Pence	 Very limited Slope 	 1.00 	 Somewhat limited Slope 	 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.30 0.05
671B: Spoonerhill, stony	 Not limited 	 	 Not limited 	 	Somewhat limited Droughty Depth to saturated zone Content of large	 0.42 0.19 0.05
Spoonerhill	 Not limited 	 	 Not limited 		stones 	 0.42 0.19 0.01

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trails		Off-road motorcycle trai	ls	 Golf fairways 	Golf fairways	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
680B: Stanberry, stony	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.01	
Pence, stony	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Droughty Content of large stones	 0.30 0.01 	
683A: Tipler	 Not limited 	 	 Not limited 	 	 Not limited 	 	
706A: Winterfield	 Very limited Depth to saturated zone Flooding	 1.00 0.40	saturated zone	 1.00 0.40	 Very limited Flooding Depth to saturated zone Droughty	 1.00 1.00 0.10	
Totagatic	 Very limited Depth to saturated zone Ponding Flooding	 1.00 1.00 0.40	saturated zone Ponding	 1.00 1.00 0.40	 Very limited Flooding Depth to saturated zone Ponding Droughty	 1.00 1.00 1.00 0.37	
724A: Rib	 Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	
Rock outcrop	 Not rated 	 	 Not rated 	 	 Not rated 	 	
726B: Sissabagama	 Somewhat limited Too sandy	 0.81	 Somewhat limited Too sandy	 0.81	 Somewhat limited Droughty	 0.42	
733A: Wozny	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	saturated zone Ponding	 1.00 1.00 0.50	saturated zone	 1.00 1.00 	
771A: Lenroot	 Somewhat limited Too sandy 	 0.72 	 Somewhat limited Too sandy 	 0.72 		 0.99 0.19 	
827A: Scoba	 Not limited 	 	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.19 	

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
853C: Frogcreek	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone	 1.00		
Stinnett	 Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone	 1.00 		
Wozny	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding 	 1.00 1.00		
856B: Stinnett	 Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone	 1.00 		
857B: Frogcreek	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone	1.00		
857C: Frogcreek	 Very limited Depth to saturated zone Water erosion Too stony	 1.00 1.00 0.50	 Very limited Depth to saturated zone Water erosion Too stony	 1.00 1.00 0.50	Very limited Depth to saturated zone Slope	 1.00 0.16		
873B: Stanberry	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.01		
873C: Stanberry	 Somewhat limited Too stony 	 0.50 	Somewhat limited Too stony 	 0.50 	Somewhat limited Slope Depth to saturated zone Content of large stones	 0.37 0.19 0.01		
873D: Stanberry	 Somewhat limited Slope Too stony 	 0.92 0.50 	 Somewhat limited Too stony 	 0.50 	 Very limited Slope Depth to saturated zone Content of large stones	 1.00 0.19 0.01		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways			
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
905A: Cublake	!	 0.50	 Somewhat limited Too sandy	 0.50	 Somewhat limited Droughty	 0.61		
926A: Flink	Depth to saturated zone	 1.00 0.50	saturated zone	 1.00 0.50	 Very limited Depth to saturated zone Droughty	 1.00 0.64		
943D: Stanberry	 Somewhat limited Too stony Slope 	 0.50 0.18 	 Somewhat limited Too stony 	 0.50 	Very limited Slope Depth to saturated zone Content of large stones	 1.00 0.19 0.01		
Greenwood	Depth to saturated zone	 1.00 1.00	saturated zone	 1.00 1.00	saturated zone	 1.00 1.00		
948A: Billyboy	 Somewhat limited Depth to saturated zone	 0.44 	 Somewhat limited Depth to saturated zone	 0.44 	 Somewhat limited Depth to saturated zone	 0.75 		
970C: Keweenaw	 Not limited 	 	 Not limited 	 	Somewhat limited Slope Droughty Content of large stones	 0.37 0.05 0.01		
Pence	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	Somewhat limited Slope Droughty Content of large stones	 0.37 0.30 0.01		
Greenwood	 Not rated 	 	 Not rated 	 	 Not rated 	 		
970E: Keweenaw	 Very limited Slope 	 1.00 	 Somewhat limited Slope 	 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.05 0.01		
Pence	 Very limited Slope Too stony 	 1.00 0.50 	 Somewhat limited Too stony Slope 	 0.50 0.22 	 Very limited Slope Droughty Content of large stones	 1.00 0.30 0.01		
Greenwood	 Not rated 	 	 Not rated 	 	 Not rated 	 		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	 Paths and trail 	s	Off-road motorcycle trai	ls	Golf fairways 			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
1070C: Fremstadt	 Not limited 	 	 Not limited 	 	 Somewhat limited Slope Droughty	 0.16 0.01		
Cress	 Not limited 	 	 Not limited 	 	 Somewhat limited Droughty Slope	 0.13 0.04		
1070D: Fremstadt	 Somewhat limited Slope 	 0.92	 Not limited 	 	 Very limited Slope Droughty	 1.00 0.01		
Cress	 Somewhat limited Slope	0.68	 Not limited 		 Very limited Slope Droughty	 1.00 0.13		
1080B: Spoonerhill	 Not limited 		 Not limited 		 Somewhat limited Droughty Depth to saturated zone Content of large stones	 0.42 0.19 0.01		
Spoonerhill, stony	 Not limited 	 	 Not limited 	 		 0.42 0.19 0.05		
Cress	 Not limited 		 Not limited 		 Somewhat limited Droughty	0.13		
1653C: Stanberry	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Too stony 	 0.50 	 Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.01		
Parkfalls	 Very limited Depth to saturated zone Too stony	:	 Very limited Depth to saturated zone Too stony	 1.00 0.50	saturated zone	 1.00 0.01		
Wozny	 Very limited Depth to saturated zone Ponding Too stony	 1.00 1.00 0.50	saturated zone	 1.00 1.00 0.50	 Very limited Depth to saturated zone	 1.00 1.00		
2015: Pits	 Not rated 		 Not rated 		 Not rated 	 		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways 			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
2050: Landfill	 Not rated 	 	 Not rated	 	 Not rated	 		
3011A: Barronett	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 - 1.00 - 1.00	 Very limited Depth to saturated zone Ponding	1.00		
3125A: Meehan	 Very limited Depth to saturated zone Too sandy	 1.00 0.81	 Very limited Depth to saturated zone Too sandy	 1.00 0.81	 Very limited Depth to saturated zone Droughty	 1.00 0.88		
3126A: Wurtsmith	 Somewhat limited Too sandy 	 0.60 	 Somewhat limited Too sandy 	 0.60 	Somewhat limited Droughty Depth to saturated zone	 0.83 0.19		
3276A: Au Gres	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Droughty	 1.00 0.09		
3312B: Glendenning, very stony	 Very limited Depth to saturated zone Too stony	 1.00 0.50	Very limited Depth to saturated zone Too stony	 1.00 0.50	 Very limited Depth to saturated zone Content of large stones	 1.00 0.03		
Glendenning	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone 	 	 Very limited Depth to saturated zone Content of large stones	 1.00 0.01		
3336A: Fenander	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00		
3403A: Loxley	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 		
Beseman	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00		

Table 16b.--Recreational Development--Continued

Map symbol and soil name	Paths and trail	s	Off-road motorcycle trai	ls	Golf fairways			
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value		
						İ		
3403A: Dawson	 Very limited	 	 Very limited	 	 Very limited			
24#5011	Depth to	1.00		1.00	-	1.00		
	saturated zone	į	saturated zone	į	saturated zone	į		
	Ponding	1.00	Ponding	1.00	Ponding	1.00		
3424C:								
Frogcreek	Very limited	1	Very limited	ĺ	Very limited	İ		
	Depth to	1.00	-	1.00	-	1.00		
	saturated zone Too stony	 0.50	saturated zone Too stony	 0.50	saturated zone			
	100 stony	0.50	100 stony	0.50				
Magroc	Very limited	į	Very limited	į	Very limited	į		
	Depth to	1.00	-	1.00	-	1.00		
	saturated zone		saturated zone		saturated zone Content of large			
	Too stony	0.50 	Too stony 	0.50 	stones			
Stinnett	 Very limited	 	 Very limited	 	 Very limited			
beimeee	Depth to	1.00	-	1.00	Depth to	1.00		
	saturated zone	į	saturated zone	į	saturated zone	į		
	Too stony	0.50	Too stony	0.50				
Rock outcrop	 Not rated 	 	 Not rated 	 	 Not rated 			
3446A:								
Newson	Very limited		Very limited		Very limited			
	Depth to	1.00	_	1.00		1.00		
	saturated zone Ponding	 1.00	saturated zone Ponding	 1.00	saturated zone Ponding	1.00		
	Foliating		Foliding		Foliding			
3448B:								
Grettum	Somewhat limited Too sandy	 0.81	Somewhat limited Too sandy	 0.81	Somewhat limited Droughty	0.61		
	100 sandy		100 sandy		Dioughty			
3448C:		İ		İ		1		
Grettum		 0.81	Somewhat limited	:	Somewhat limited	0.61		
	Too sandy		Too sandy 	0.81 	Droughty Slope	0.01		
25163			l I					
3516A: Slimlake	 Not limited	 	 Not limited	 	 Somewhat limited	l		
DIIMIUNG					Droughty	0.21		
3629B:	 	 	[[[
Perida	Somewhat limited		 Somewhat limited		 Somewhat limited			
	Too sandy	0.81	Too sandy	0.81	Droughty	0.44		
M-W:		 	 	 	[1		
Miscellaneous water	Not rated		Not rated		Not rated			
W:		 	[[
Water	Not rated	i	Not rated	i	Not rated	i		

Table 17.--Wildlife Habitat

(See text for definitions of terms used in this table. Absence of an entry indicates that no rating is applicable)

	<u> </u>	Pote	ential fo		Potential as habitat for					
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood		 Wetland plants 	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
3A: Totagatic	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
Bowstring	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
Ausable	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
22A: Comstock	 Fair 	 Good	 Good	 Good	 Good	 Fair 	 Fair 	 Good	 Good	 Fair
24A: Poskin	 Fair 	 Good	 Good	 Good	 Good 	 Fair 	 Fair 	 Good	 Good	 Fair
27A: Scott Lake	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
28B: Haugen, very stony	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Poor 	 Good 	 Very poor
Haugen	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Rosholt, very stony	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Rosholt	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
28C: Haugen, very stony	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor
Haugen	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Rosholt, very stony	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Rosholt	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor 	 Very poor 	 Good 	 Good 	 Very poor
33B: Chetek	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
33C: Chetek	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
38A: Rosholt	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
38B: Rosholt	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor 	 Good 	 Good 	 Very poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		bitat for-		
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood		 Wetland plants 	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
38C: Rosholt	 Fair 	 Good	 Good	 Good	 Good	 Poor 	 Very poor	 Good	 Good	 Very poor
38D: Rosholt	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
42D: Amery	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor
43B: Antigo	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
43C: Antigo	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor
43D: Antigo	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
48A: Brill	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor	 Poor 	 Good 	 Good	 Poor
63A: Crystal Lake	 Good 	 Good	 Good	 Good	 Good	 Poor	 Poor	 Good	 Good	 Poor
63B: Crystal Lake	 Good 	 Good	 Good	 Good	 Good 	 Poor	 Poor 	 Good	 Good 	 Poor
63C: Crystal Lake	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good	 Good 	 Very poor
63E: Crystal Lake	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
64A: Totagatic	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
Winterfield	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair
69B: Keweenaw	 Poor	 Fair 	 Good	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
Sayner	 Poor 	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Poor 	 Poor 	 Very poor
Vilas	 Very poor	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Poor 	 Poor 	 Very poor
69C: Keweenaw	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor

Table 17.--Wildlife Habitat--Continued

	<u> </u>	Pote		or habit	at eleme	nts	Potential as habitat				
Map symbol and soil name	Grain and seed	 Grasses and	ceous	wood	erous	 Wetland plants	water	wild-	Wood- land wild-	Wetland wild- life	
	crops	legumes	plants	trees	plants	1	areas	life	life	1	
69C: Sayner	 Poor 	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	Poor	 Poor 	 Very poor	
Vilas	 Very poor	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Poor	 Poor 	Very poor	
69E:	! 		! 				! 				
Keweenaw	 Poor 	Fair 	Good	Good	Good	Very poor	 Very poor	Fair	Good	Very poor	
Sayner	 Very poor	Poor	 Fair 	 Poor 	Poor	Very poor	 Very poor	Poor	Poor	Very poor	
Vilas	 Very poor 	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor 	 Poor	 Poor 	 Very poor	
74B: Vilas	 Poor 	 Fair 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	Fair	 Poor 	 Very poor	
74C: Vilas	 Poor 	 Fair 	 Fair 	 Poor	 Poor	 Very poor	 Very poor	Fair	 Poor	 Very poor	
74D: Vilas	 Very poor	 Poor 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	Poor	 Poor 	 Very poor	
100B: Menahga	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	Poor	 Fair 	 Very poor	
100C: Menahga	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	Poor	 Fair 	 Very poor	
100D: Menahga	 Very poor	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	Poor	 Fair 	 Very poor	
127D: Amery	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	Good	 Good 	 Very poor	
Rosholt	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	Fair	 Good 	 Very poor	
127E: Amery	 Very poor	 Very poor	 Good 	 Good	 Good 	 Very poor	 Very poor	 Poor	 Fair 	 Very poor	
Rosholt	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Very poor	 Very poor	Poor	 Good 	 Very poor	
156B:	 	 	 	 			 				
Magnor, very stony	Very poor 	Poor 	Good 	Good 	Good 	Poor 	Poor 	Poor	Good 	Poor 	
Magnor	Fair	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	

Table 17.--Wildlife Habitat--Continued

	Potential for habitat elements							Potential as habitat for-				
Map symbol and soil name	Grain and seed crops	Grasses and	ceous	wood		 Wetland plants 	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life		
157B: Freeon, very stony	 Very poor	 Poor	 Good	 Good	 Good	 Poor	 Poor	 Poor	 Good	 Poor		
Freeon	 Good 	 Good 	 Good 	Good	 Good 	 Poor 	 Poor 	 Good 	 Good 	 Poor 		
157C: Freeon, very stony	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor		
Freeon	 Fair 	 Good 	 Good 	Good	Good	 Very poor	 Very poor	 Good 	Good	 Very poor		
160A: Oesterle	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Poor 	 Good 	 Good 	 Poor 		
182B: Padus	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor		
182C: Padus	 Fair	 Good 	 Good 	 Good	 Good	 Very poor	 Very poor	 Good 	 Good 	 Very poor		
192A: Worcester	 Fair 	 Good 	 Good 	 Good	 Good 	 Fair 	 Fair 	 Good 	 Good 	 Fair 		
193A: Minocqua	 Very poor	 Fair 	 Fair 	 Fair 	 Fair 	 Good 	 Good	 Poor	 Fair 	 Good 		
215B: Pence	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor 		
215C: Pence	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor		
215D: Pence	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor		
315A: Rib	 Poor	 Fair	 Fair	 Fair	 Fair	 Good	 Good	 Fair	 Fair	 Good		
337A: Plover	 Fair	 Good	 Good	 Good	 Good	 Fair	 Fair	 Good	 Good	 Fair		
368B: Mahtomedi	 Poor 	 Fair 	 Fair 	 Poor	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor		
Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor		
368C: Mahtomedi	 Poor 	 Fair 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor		
Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor 	 Fair 	 Fair 	 Very poor 		

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	Potential as habitat for		
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood	1	 Wetland plants 	:	Open- land wild- life	Wood- land wild- life	Wetland wild- life	
368D: Mahtomedi	 Poor 	 Fair 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor	
Cress	 Fair 	 Fair 	 Fair 	Fair	 Fair 	Very poor	 Very poor	 Fair 	 Fair 	Very poor	
371A: Croswell	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Poor 	 Very poor	 Fair 	 Fair 	 Very poor	
380B: Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor	
Rosholt	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor	
380C: Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor	
Rosholt	 Fair 	 Good 	 Good 	 Good 	 Good 	Very poor	 Very poor	 Good 	 Good 	 Very poor	
380D: Cress	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor	
Rosholt	 Very poor	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor	
383B: Mahtomedi	 Poor 	 Fair 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor	
383C: Mahtomedi	 Poor 	 Fair 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor	
383D: Mahtomedi	 Very poor	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor	
396B: Friendship	 Poor 	 Poor 	 Fair 	 Fair 	 Good 	 Poor 	 Very poor	 Fair 	 Good 	 Very poor	
Wurtsmith	 Poor 	 Poor 	 Fair 	 Fair 	 Fair 	 Poor 	 Very poor	 Poor 	 Fair 	 Very poor	
Grayling	 Poor 	 Poor 	 Fair 	 Poor 	 Poor 	 Poor 	 Very poor	 Poor 	 Poor 	 Very poor	
397A: Perchlake	 Poor 	 Fair 	 Good 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	
399B: Grayling	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Poor 	 Very poor	 Poor 	 Fair 	 Very poor	

Table 17.--Wildlife Habitat--Continued

	1	Pote		or habit	at eleme	nts		Potenti	bitat for	
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood	 Conif- erous plants	 Wetland plants 	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
399C: Grayling	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
399D: Grayling	 Very poor	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
405A: Lupton	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
Cathro	 Poor 	 Poor 	 Poor 	 Poor	Poor	Good	 Good 	 Poor 	 Poor 	 Good
Tawas	Poor	 Poor	 Poor 	Poor	Poor	Good	 Good 	 Poor 	Poor	 Good
406A: Loxley	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
407A: Seelyeville	 Very poor	 Very poor	 Very poor	 Very poor	 Very poor	 Good 	 Good	 Very poor	 Very poor	 Good
Markey	 Poor	 Poor	 Poor	 Poor	 Poor	Good	 Good	 Poor	 Poor	 Good
410A: Seelyeville	 Very poor	 Very poor	 Very poor	 Very poor	 Very poor	 Good 	 Good 	 Very poor	 Very poor	 Good
Cathro	 Poor	 Poor	 Poor	 Poor	 Poor	 Good	 Good	 Poor	 Poor	 Good
412A: Rifle	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
Tacoosh	 Poor	 Poor	 Poor	 Poor	Poor	Good	 Good	 Poor	 Poor	 Good
415A: Greenwood	 Very poor	 Poor	 Poor	 Poor 	 Poor 	 Good 	 Good	 Poor	 Poor	 Good
439B: Graycalm	 Poor 	 Poor 	 Fair 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Menahga	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
439C: Graycalm	 Poor 	 Poor 	 Fair 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Menahga	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
439D: Graycalm	 Poor	 Poor 	 Fair 	 Good 	 Good 	 Very poor	 Very poor	 Poor	 Good	 Very poor
Menahga	 Poor 	 Poor 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potentia	al as ha	bitat for
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood		 Wetland plants 	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
441C: Freeon	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Cathro	 Poor 	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor	 Good
442C: Haugen	 Fair 	 Good	 Good	 Good	 Good	 Very poor	 Very poor	 Good	 Good	 Very poor
Greenwood	 Very poor 	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
443D: Amery	 Fair 	 Good	 Good	 Good 	 Good 	 Very poor	 Very poor	 Good	 Good	 Very poor
Greenwood	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
461A: Bowstring	 Poor 	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
484A: Greenwood	 Very poor	 Poor	 Poor	 Poor 	 Poor 	 Good 	 Good	 Poor	 Poor	 Good
Beseman	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	 Poor 	 Good
495B: Karlsborg	 Fair	 Good	 Good	 Good	 Good	 Poor	 Poor	 Good	 Good	 Poor
Grettum	 Poor 	 Poor 	 Fair 	 Good 	 Good 	Very poor	 Very poor	 Poor 	 Good 	 Very poor
Perida	 Poor 	 Fair 	 Good 	 Fair 	 Fair 	Poor	 Poor 	 Fair 	 Fair 	 Poor
495C: Karlsborg	 Poor 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
Grettum	 Poor 	 Poor 	 Fair 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Perida	 Poor 	 Fair 	 Good 	 Fair 	 Fair 	 Poor 	 Poor 	 Fair 	 Fair 	 Poor
495D: Karlsborg	 Poor 	 Good 	 Good	 Good 	 Good 		 Very poor	 Fair 	 Good	 Very poor
Grettum	 Poor 	 Poor 	 Fair 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Perida	 Poor 	 Fair 	 Good 	 Fair 	 Fair 	 Poor 	 Poor 	 Fair 	 Fair 	 Poor
497A: Meenon	 Poor	 Fair 	 Good 	 Good	 Good	 Fair 	 Fair 	 Fair 	 Good	 Fair
515A: Manitowish	 Fair 	 Fair 	 Good 	 Good 	 Good 	 Poor 	 Poor 	 Fair 	 Good	 Poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f		Potential as habitat for					
Map symbol and	Grain and	 Grasses	Wild herba-	 Hard-	 Conif-	 Wetland		Open-	Wood- land	Wetland wild-
soil name	seed crops	and legumes	ceous	wood trees	erous plants	plants	water areas	wild- life	wild- life	life
521A: Dody 524E:	İ	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good	 Poor 	 Poor 	 Good
Rock outcrop.	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Fair 	 Good 	 Very poor
Metonga	 Very poor	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor 	 Fair 	 Good 	 Very poor
542B: Haugen, very stony	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Haugen	Good	Good	Good	Good	Good	Poor 	 Very poor	Good	Good	Very poor
542C: Haugen, very stony	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor
Haugen	Good 	 Good 	 Good 	Good	 Good 	Poor	 Very poor	 Good 	Good	 Very poor
543B: Anigon	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
543C2: Anigon	 Fair 	 Good 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Good 	 Good 	 Very poor
544F: Menahga	 Very poor	 Poor 	 Fair 	 Poor	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
Mahtomedi	 Very poor	 Poor 	 Fair 	Poor	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
555A: Fordum	 Poor	 Fair 	 Fair 	 Fair 	 Fair 	 Good	 Good	 Fair 	 Fair	 Good
574B: Sayner	 Poor 	 Fair 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Fair 	 Poor 	 Very poor
574C: Sayner	 Poor 	 Fair 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Fair 	 Poor 	 Very poor
574E: Sayner	 Very poor	 Fair 	 Fair 	 Poor 	 Poor 	 Very poor	 Very poor	 Poor 	 Poor 	 Very poor
579B: Parkfalls	 Fair 	 Good 	 Good 	 Good	 Good 	 Poor 	 Poor 	 Good 	 Good 	 Poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential fo		Potential as habitat for					
Map symbol and soil name	Grain and seed	 Grasses and	ceous	wood	erous	 Wetland plants	water	wild-	Wood- land wild-	Wetland wild- life
600A. Haplosaprists and Psammaquents	crops	legumes	plants 	trees	plants	 	areas	life 	life	
615B: Cress	 Fair 	 Fair 	 Fair 	 Fair	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
615C: Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
615D: Cress	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Poor 	 Fair 	 Very poor
623A: Capitola	 Very poor	 Poor	 Fair 	 Fair	 Fair 	 Good	 Good	 Poor	 Fair 	 Good
624A: Ossmer	 Fair 	 Good 	 Good 	 Good 	 Good 	 Fair 	 Fair 	 Good 	 Good 	 Fair
632A: Aftad	 Good 	 Good 	 Good	 Good 	 Good 	 Poor 	 Very poor	 Good	 Good	 Very poor
632B: Aftad	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good	 Good 	 Very poor
632C: Aftad	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good	 Good 	 Very poor
633F: Pence	 Very poor	 Poor 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Poor	 Fair 	 Very poor
Padus	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
648B: Sconsin	 Good 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
670C: Keweenaw	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
Pence	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
670E: Keweenaw	 Very poor	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Poor 	 Good 	 Very poor
Pence	 Very poor 	 Poor 	 Fair 	 Fair 	 Fair 	 Very poor 	 Very poor 	 Poor 	 Fair 	 Very poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	al as ha	bitat for
Map symbol and soil name	Grain and seed crops	 Grasses and legumes	ceous	wood	 Conif- erous plants	 Wetland plants	 Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life
671B: Spoonerhill, stony	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Fair 	 Good 	 Very poor
Spoonerhill	Poor	 Fair 	 Good 	Good	Good	Poor	 Very poor	 Fair 	Good	Very poor
680B: Stanberry, stony	 Very poor	 Poor 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Poor 	 Good 	 Very poor
Pence, stony	 Very poor	 Poor 	 Fair 	 Fair 	Fair	Very poor	 Very poor	 Poor 	Fair	Very poor
683A: Tipler	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
706A: Winterfield	 Poor	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair
Totagatic	 Very poor	 Poor 	 Poor 	 Poor 	Poor	Good	 Good 	 Poor 	Poor	Good
724A: Rib Rock outcrop.	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Good 	 Good 	 Fair 	 Fair 	 Good
726B: Sissabagama	 Poor 	 Fair 	 Fair 	 Fair 	 Fair 	 Poor 	 Very poor	 Poor 	 Fair 	 Very poor
733A: Wozny	 Very poor	 Poor 	 Fair 	 Fair 	 Fair 	 Good 	 Good 	 Poor 	 Fair	 Good
771A: Lenroot	 Poor 	 Fair 	 Fair 	 Poor 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
827A: Scoba	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good	 Very poor
853C: Frogcreek	 Poor 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good	 Good	 Poor
Stinnett	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
Wozny	 Very poor	 Poor 	 Fair 	 Fair 	 Fair 	 Good 	 Good 	 Poor 	 Fair 	 Good
856B: Stinnett	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Good 	 Good 	 Very poor
857B: Frogcreek	 Poor 	 Good 	 Good 	 Good 	 Good 	 Poor 	 Very poor 	 Good 	 Good 	 Poor

Table 17.--Wildlife Habitat--Continued

		Pote		or habit	at eleme	nts				bitat fo
Map symbol	Grain		Wild					Open-	Wood-	Wetlan
and	and	Grasses		1	1	Wetland	:		land	wild-
soil name	seed	and	ceous	wood	erous	plants	water	wild-	wild-	life
	crops	legumes	plants	trees	plants		areas	life	life	
357C:							 			
Frogcreek	Poor	Good	Good	Good	Good	Poor	Very poor	Good	Good	Poor
	 	 	 	 			poor	 	 	
73B:			! 	İ			! 	! 	İ	
Stanberry	Very	Poor	Good	Good	Good	Poor	Very	Poor	Good	Very
	poor	ĺ	ĺ	İ	İ	İ	poor	ĺ	İ	poor
373C:						 	 			
Stanberry	: -	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
	poor	 	 	1		poor	poor	 	1	poor
73D:		 		1			 	 	1	
Stanberry	Very	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
-	poor	į	į	İ	į	poor	poor	İ	İ	poor
905A:		!	[[<u> </u>		[
Cublake	Poor	Poor	Fair	Fair	Fair	Poor	Very	Poor	Fair	Very
							poor			poor
026A:		 	 	1		1	 	 	1	
/20A: Flink	Poor	 Fair	 Good	Good	Good	Poor	 Poor	 Fair	Good	Poor
111111										
943D:		İ		İ	İ	İ	ĺ	İ	İ	İ
Stanberry	Very	Poor	Good	Good	Good	Very	Very	Poor	Good	Very
	poor					poor	poor			poor
Greenwood		Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
	poor						 	 		
48A:		 	 	 		 	 	 	 	
Billyboy	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
				İ					İ	
70C:	į	į	j	į	į	į	İ	j	į	į
Keweenaw	Poor	Fair	Good	Good	Good	Very	Very	Fair	Good	Very
		!	[!	poor	poor			poor
Page 4	 Badon	 made:		 Bades				 	 Bades	
Pence	rair	Fair	Fair	Fair	Fair	Very	Very	Fair	Fair	Very
	 	I I	 	1		poor	poor	 	1	poor
Greenwood	Verv	Poor	 Poor	Poor	Poor	Good	 Good	 Poor	Poor	Good
	poor	į	į	İ	i	İ	İ	j	İ	i
		İ	İ	İ	İ	İ		İ	İ	İ
70E:										
Keweenaw		Fair	Good	Good	Good	Very	Very	Poor	Good	Very
	poor					poor	poor			poor
Pence	Poor	 Fair	 Fair	 Fair	 Fair	Very	 Very	 Fair	 Fair	Very
- ence	15001	1.011	 -arr	Lair	Fair	Very poor	very poor	 rarr	Lair	Very poor
				İ			2001		İ	
Greenwood	Very	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good
	poor	İ	İ	İ	İ	İ		İ	İ	İ
070C:										-
Fremstadt	Poor	Fair	Good	Good	Good	Very	Very	Fair	Good	Very
				1		poor	poor		1	poor
Cress	 Fai∽	 Pai=	 Pai=	 Pai=	 Pai=	1702	17027-	 Pai∽	 Pai=	
CIESS	rair	Fair	Fair	Fair	Fair	Very	: -	Fair	Fair	Very
	1	1	1	1	1	poor	poor	I	1	poor

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit	at eleme	nts		Potenti	al as ha	bitat for-
Map symbol and soil name	Grain and seed	 Grasses and	ceous	wood	erous	 Wetland plants	water	wild-	Wood- land wild-	Wetland wild- life
	crops	legumes	plants	trees	plants	1	areas	life	life	1
1070D: Fremstadt	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Very poor	 Very poor	 Fair 	 Good 	 Very poor
Cress	Poor	 Fair 	 Fair 	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor
1080B: Spoonerhill	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Fair 	 Good	 Very poor
Spoonerhill, stony	 Poor 	 Fair 	 Good 	 Good 	 Good 	 Poor 	 Very poor	 Fair 	 Good 	 Very poor
Cress	 Fair 	 Fair 	 Fair 	 Fair 	 Fair 	 Very poor	 Very poor	 Fair 	 Fair 	 Very poor
1653C: Stanberry	 Very poor	 Poor 	 Good	 Good	 Good	 Very poor	 Very poor	 Poor	 Good	 Very poor
Parkfalls	 Fair 	 Good 	 Good 	 Good 	 Good 	 Poor	 Poor 	 Good 	 Good 	 Poor
Wozny	Very poor	Poor	Fair 	Fair	Fair	Good	Good	Poor	Fair	Good
2015. Pits	 	 	 	 			 	 		
2050. Landfill	 	 	 	 			 	 		
3011A: Barronett	 Poor	 Fair	 Fair	 Fair	 Fair	 Good	 Good	 Fair	 Fair	 Good
3125A: Meehan	 Poor	 Fair	 Good	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair	 Fair
3126A: Wurtsmith	 Poor	 Poor 	 Fair 	 Fair 	 Fair 	 Poor	 Very poor	 Poor 	 Fair	 Very poor
3276A: Au Gres	 Poor	 Fair 	 Good	 Good	 Good	 Poor	 Poor	 Fair 	 Good	 Poor
3312B: Glendenning, very stony	 Fair	 Fair	 Good	Good	Good	Fair	 Poor	 Good	Good	 Fair
Glendenning	 Fair 	 Fair 	 Good 	 Good 	 Good 	 Fair 	 Poor 	 Good 	 Good 	 Fair
3336A: Fenander	 Fair	 Fair	 Fair	 Fair	Fair	Good	 Good	 Fair	Fair	 Good
3403A: Loxley	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good	 Good 	 Poor 	 Poor 	 Good
Beseman	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good	 Good 	 Poor 	Poor	 Good
Dawson	 Very poor	 Poor 	 Poor 	 Poor 	 Poor 	 Good 	 Good 	 Poor 	Poor	 Good

Table 17.--Wildlife Habitat--Continued

		Pote	ential f	or habit		Potential as habitat for				
Map symbol	Grain		Wild					Open-	Wood-	Wetland
and	and	Grasses	herba-	Hard-	Conif-	Wetland	Shallow	land	land	wild-
soil name	seed	and	ceous	wood	erous	plants	water	wild-	wild-	life
	crops	legumes	plants	trees	plants		areas	life	life	
424C:										
		Good	 Good	Good	 Good		 •••	 Good	Good	
Frogcreek	POOT	GOOG	Good	GOOG	GOOG	Poor	Very	Good	Good	Poor
	 		 	I I	 		poor	 	 	
Magroc	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor
Stinnett	 Fair	Good	 Good	Good	Good	Poor	 Very	 Good	Good	 Very
							poor			poor
Rock outcrop.	 		 		 			 	ļ	
446A:	 	 	 		 	 		 	 	
Newson	Fair	Fair	Fair	Poor	Poor	Good	Good	Fair	Poor	Good
	į	į	İ	İ	į	į		: 	į	İ
448B:										
Grettum	Poor	Poor	Fair	Good	Good	Very	Very	Poor	Good	Very
						poor	poor			poor
448C:	 		 		 			 	 	
Grettum	Poor	Poor	Fair	Good	Good	Very	Very	Poor	Good	Very
	į	į	į	į	į	poor	poor		į	poor
516A:]	 		 	 		 	 	
Slimlake	Fair	Fair	Good	Good	Good	Poor	Poor	Fair	Good	Poor
629B:	 		 		 	 		 	 	
Perida	Poor	Fair	Good	Fair	Fair	Poor	Poor	Fair	Fair	Poor
-W.	 	 	 		 	 			 	
Miscellaneous water		İ		į	į	į			į	į
	 	 	 		 	 		 	[[
Water	i	i	i	i	i	i		i i	i	i

Table 18a.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Dwellings witho basements	ut	Dwellings with basements	l.	Small commercia buildings	1
	Rating class and	Value	 Rating class and	Value	 Rating class and	Value
	limiting features		limiting features		limiting features	
	Ī	İ	İ	İ	ĺ	İ
3A:						
Totagatic			Very limited		Very limited	
	Subsidence	1.00	!	1.00	1	1.00
	Flooding	1.00	Flooding	1.00		1.00
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Bowstring	 Very limited		 Very limited		 Very limited	
Dombering	Subsidence	1.00		1.00		1.00
	Flooding	1.00	!	1.00		1.00
	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	i
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Ausable		1	Very limited		Very limited	
	Subsidence	1.00	!	1.00		1.00
	Flooding	1.00		1.00		1.00
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00	Ponding	1.00
22A:	 		 		 	
Comstock	 Verv limited		 Very limited		 Very limited	i
33	Depth to	1.00	: -	1.00		1.00
	saturated zone		saturated zone		saturated zone	i
	Shrink-swell	0.50		i	Shrink-swell	0.50
	j	į	j	į	j	į
24A:						
Poskin	Very limited		Very limited		Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	ļ
0.00						
27A: Scott Lake	 Not limited		 Tom: limited		 Not limited	
Scott Lake	Not illited		Very limited Depth to	0.99	Not illited	
	 		saturated zone	0.99	 	
						i
28B:		i		i		i
Haugen, very stony	Somewhat limited	İ	 Very limited	į	Somewhat limited	İ
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
	!	ļ	!		!	
Haugen		'	Very limited		Somewhat limited	1
	Depth to	0.39	Depth to	1.00	: -	0.39
	saturated zone		saturated zone		saturated zone	
Posholt work store	 Not limited	I	 Not limited		 Not limited	1
Rosholt, very stony	 MOC TIMITCEG	I	 MOC TIMITCEG		Not limited	1
Rosholt	 Not limited		 Not limited		 Not limited	i
	1	!		!		1

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		 Small commercia buildings	al
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		Ţ.				1
28C: Haugen, very stony	 Somewhat limited Depth to	0.39	 Very limited Depth to	 1.00	 Very limited Slope	1.00
	saturated zone	0.04	saturated zone	0.04	Depth to saturated zone	0.39
Haugen	 Somewhat limited Depth to	 0.39	 Very limited Depth to	 1.00	 Very limited Slope	 1.00
	saturated zone	0.04	saturated zone	0.04	Depth to saturated zone	0.39
Rosholt, very stony	 Somewhat limited Slope	0.04	 Somewhat limited Slope	0.04	 Very limited Slope	1.00
Rosholt	 Somewhat limited Slope	0.04	 Somewhat limited Slope	0.04	 Very limited Slope	1.00
33B:	 	i i		 	 	l l
Chetek	 Not limited 	 	 Not limited 	; 	 Not limited 	
33C: Chetek	 Somewhat limited Slope 	 0.04	 Somewhat limited Slope	 0.04	 Very limited Slope	 1.00
38A: Rosholt	 Not limited 		 Not limited 	 	 Not limited 	
38B: Rosholt	 Not limited 	 	 Not limited 	 	 Not limited 	
38C: Rosholt	 Somewhat limited Slope 	0.04	 Somewhat limited Slope	 0.04	 Very limited Slope	1.00
38D: Rosholt	 Very limited Slope 	1.00	 Very limited Slope	 1.00	 Very limited Slope	 1.00
42D:	İ	į		į		į
Amery	Very limited Slope 	 1.00 	Very limited Slope 	 1.00 	Very limited Slope 	1.00
43B: Antigo	 Not limited	į Į	 Not limited	į Į	 Not limited	Ì
43C:	 		 		 	
Antigo	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	 Very limited Slope	1.00
43D:						
Antigo	Very limited Slope	1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
48A:	[[[
Brill	Somewhat limited Depth to saturated zone	0.98	 Very limited Depth to saturated zone	 1.00 	Somewhat limited Depth to saturated zone	0.98

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements	ut	Dwellings with basements		Small commercia buildings	1
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
63A: Crystal Lake	 Somewhat limited Shrink-swell Depth to saturated zone	 0.50 0.39	Very limited Depth to saturated zone	 1.00 	 Somewhat limited Shrink-swell Depth to saturated zone	 0.50 0.39
63B: Crystal Lake	 Somewhat limited Shrink-swell Depth to saturated zone	 0.50 0.39 	· -	 1.00 	 Somewhat limited Shrink-swell Depth to saturated zone	 0.50 0.39
63C: Crystal Lake	Somewhat limited Shrink-swell Depth to saturated zone Slope	0.50	 Very limited Depth to saturated zone Slope	1.00	 Very limited Slope Shrink-swell Depth to saturated zone	 1.00 0.50 0.39
63E: Crystal Lake	 Very limited Slope Shrink-swell	 1.00 0.50 	 Very limited Slope Depth to saturated zone	 1.00 0.99 	 Very limited Slope Shrink-swell 	 1.00 0.50
64A: Totagatic	 Very limited Subsidence Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00 	Flooding Depth to saturated zone	 1.00 1.00 1.00 	Flooding Depth to saturated zone	 1.00 1.00 1.00
Winterfield	 Very limited Flooding Depth to saturated zone	 1.00 1.00 	 Very limited Flooding Depth to saturated zone	 1.00 1.00 		 1.00 1.00
69B: Keweenaw	 Not limited	<u>.</u>	 Not limited	<u> </u> 	 Not limited	į Į
Sayner	 Not limited 	 	 Not limited 		 Not limited 	
Vilas	Not limited	 	Not limited		 Not limited 	į Į
69C: Keweenaw	 Somewhat limited Slope	 0.16	 Somewhat limited Slope	 0.16	 Very limited Slope	1.00
Sayner	Somewhat limited Slope	 0.16	Somewhat limited Slope	0.16	 Very limited Slope	1.00
Vilas	 Somewhat limited Slope	 0.16	 Somewhat limited Slope	 0.16	 Very limited Slope	1.00
69E: Keweenaw	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		 Small commercia buildings	1
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69E: Sayner	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	
Vilas	 Very limited Slope	 1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
74B: Vilas	 Not limited 	 	 Not limited 	 	 Not limited 	
74C: Vilas	 Somewhat limited Slope	 0.37	 Somewhat limited Slope	 0.37	 Very limited Slope	1.00
74D: Vilas	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00	 Very limited Slope	1.00
100B: Menahga	 Not limited 	 	 Not limited 	 	 Not limited 	
100C: Menahga	 Somewhat limited Slope	 0.04	 Somewhat limited Slope	0.04	 Very limited Slope	1.00
100D: Menahga	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00	 Very limited Slope 	1.00
127D: Amery	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Rosholt	 Very limited Slope 	 1.00	 Very limited Slope 	1.00	 Very limited Slope 	1.00
127E: Amery	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Rosholt	 Very limited Slope	 1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
156B: Magnor, very stony	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
Magnor	Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone	1.00
157B: Freeon, very stony	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
Freeon	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	 Dwellings witho basements	ut	 Dwellings with basements		 Small commercia buildings	1
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
157C: Freeon, very stony	Very limited Depth to saturated zone Slope	 1.00 0.04	Very limited Depth to saturated zone Slope	 1.00 0.04	Very limited Depth to saturated zone Slope	 1.00 1.00
Freeon	 Very limited Depth to saturated zone Slope	 1.00 0.04	 Very limited Depth to saturated zone Slope	 1.00 0.04	 Very limited Depth to saturated zone Slope	1.00
160A: Oesterle	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00
182B: Padus	 Not limited	 	 Not limited	 	 Not limited	
182C: Padus	 Somewhat limited Slope	 0.37	 Somewhat limited Slope	 0.37	 Very limited Slope	1.00
192A: Worcester	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
193A: Minocqua	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
215B: Pence	 Not limited	 	 Not limited		 Not limited	
215C: Pence	 Somewhat limited Slope 	 0.37	 Somewhat limited Slope	 0.37	 Very limited Slope	1.00
215D: Pence	 Very limited Slope	 1.00	 Very limited Slope 	 1.00	 Very limited Slope 	1.00
315A: Rib	 Very limited Depth to saturated zone Ponding Shrink-swell	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding Shrink-swell	 1.00 1.00 0.50
337A: Plover	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00
368B: Mahtomedi	 Not limited	 	 Not limited	 	 Not limited	
Cress	Not limited		 Not limited 	 	 Not limited 	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	 Dwellings witho basements 	ut	 Dwellings with basements 		 Small commercia buildings 	1
	Rating class and	Value	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	1
368C: Mahtomedi	 Somewhat limited Slope 	 0.04	 Somewhat limited Slope 	 0.04	 Very limited Slope	 1.00
Cress	Somewhat limited Slope	0.04	 Somewhat limited Slope	0.04	 Very limited Slope	1.00
368D: Mahtomedi	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Cress	 Very limited Slope	1 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
371A: Croswell	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	0.39
380B: Cress	 Not limited		 Not limited	 	 Not limited	
Rosholt	 Not limited	j I	 Not limited	j I	 Not limited	į į
	į	į		į		į
380C: Cress	 Somewhat limited Slope	 0.04	!	 0.04	 Very limited Slope	1.00
Rosholt	 Somewhat limited Slope	 0.04	 Somewhat limited Slope	 0.04	 Very limited Slope	1.00
380D: Cress	 Very limited Slope	1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Rosholt	 Very limited Slope	1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
383B: Mahtomedi	 Not limited 	 	 Not limited 	 	 Not limited 	
383C: Mahtomedi	 Somewhat limited Slope	 0.04	 Somewhat limited Slope	 0.04	 Very limited Slope	1.00
383D: Mahtomedi	 Very limited Slope 	 1.00	 Very limited Slope 	 1.00	 Very limited Slope 	1.00
396B: Friendship	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.35	 Not limited 	
Wurtsmith	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	 0.39
Grayling	 Not limited		 Not limited	 	 Not limited	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	 Dwellings witho basements	ut	 Dwellings with basements		 Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
397A: Perchlake	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	
399B: Grayling	 Not limited	 	 Not limited	 	 Not limited	
399C: Grayling	 Somewhat limited Slope 	 0.04	 Somewhat limited Slope 	 0.04	 Very limited Slope 	1.00
399D: Grayling	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope 	 1.00
405A: Lupton	 Very limited	 1.00	 Very limited	 1.00	 Very limited	
	Subsidence Depth to saturated zone Content of	1.00 1.00 1.00	Subsidence Depth to saturated zone Content of	1.00 1.00 1.00	Subsidence Depth to saturated zone Content of	1.00 1.00 1.00
	organic matter Ponding	1.00	content of organic matter Ponding	1.00	organic matter Ponding	1.00
Cathro	Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 	 Very limited Subsidence Depth to saturated zone Ponding	 1.00 1.00 1.00		 1.00 1.00 1.00
Tawas	 Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 	 Very limited Subsidence Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00
406A: Loxley		<u>.</u> !	 -	 	 Very limited	
LOATE	Subsidence Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00 1.00	Subsidence Depth to saturated zone Content of organic matter Ponding	1.00 1.00 1.00
407A: Seelyeville	 Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 1.00	 Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 1.00	 Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
407A:	1		 		 	
Markey	Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00
	Content of organic matter	1.00	Ponding	1.00	Content of organic matter	1.00
	Ponding	1.00			Ponding	1.00
410A:			 		 	
Seelyeville	 Very limited	i	 Very limited	į	 Very limited	i
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
				i		i
Cathro	Very limited		Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone Content of	1.00	saturated zone	1.00	saturated zone Content of	1.00
	organic matter	1	Foliating	1	organic matter	1
	Ponding	1.00		i	Ponding	1.00
	[1
412A:						
Rifle	Very limited Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	j	organic matter	į	organic matter	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
Tacoosh	 Very limited		 Very limited		 Very limited	
racoobn	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	į	saturated zone	į
	Content of	1.00	Ponding	1.00	Content of	1.00
	organic matter			ļ	organic matter	
	Ponding	1.00	 		Ponding	1.00
415A:		i				
Greenwood	Very limited	i	 Very limited	į	 Very limited	i
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of organic matter	1.00	Content of organic matter	1.00	Content of organic matter	1.00
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	j	İ		İ		į
439B:		1		ļ		1
Graycalm	NOT limited		Not limited	 	Not limited	1
Menahga	Not limited		 Not limited 	 	 Not limited	
439C:						İ
Graycalm	Somewhat limited	İ	Somewhat limited	į	Very limited	İ
	Slope	0.04	Slope	0.04	Slope	1.00
Monahga			 Comowhat limited		 Vorus limited	
Menahga	Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		 Small commercial buildings	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	
439D:			l			
Graycalm	 Very limited		 Very limited	l I	 Very limited	
Graycarm	Slope	1.00	Slope	1.00	Slope	1.00
	j	į	· -	į	i -	j
Menahga	-	1	Very limited	:	Very limited	1
	Slope	1.00	Slope	1.00	Slope	1.00
441C:	 		 	l I	 	l I
Freeon	 Very limited		 Very limited	i	 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	Ì
	Slope	0.37	Slope	0.37	Slope	1.00
G. N.	 		 			
Cathro	Very limited Subsidence	1.00	Very limited Subsidence	1.00	Very limited Subsidence	1.00
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Ponding	1.00	Content of	1.00
	organic matter	į		į	organic matter	İ
	Ponding	1.00			Ponding	1.00
442C:			 -			
Haugen	 Somewhat limited		 Very limited	l I	 Somewhat limited	
naagen	Depth to	0.39	Depth to	1.00	Slope	0.88
	saturated zone		saturated zone	i	Depth to	0.39
	į	į		į	saturated zone	į
C						
Greenwood	Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone	1.00	saturated zone	1
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	į	organic matter	į	organic matter	į
	Ponding	1.00	Ponding	1.00	Ponding	1.00
4420						
443D: Amery	 Verv limited		 Very limited	l I	 Very limited	
12.1027	Slope	1.00	Slope	1.00	Slope	1.00
	İ	İ	_	İ	İ	İ
Greenwood	: -	:	Very limited	1	Very limited	1
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone Content of	1.00	saturated zone Content of	1.00	saturated zone Content of	1.00
	organic matter	1	organic matter	1	organic matter	1
	Ponding	1.00	Ponding	1.00	Ponding	1.00
	İ	į		į	İ	i
461A:	!	ļ		!	!	ļ
Bowstring		:	Very limited		Very limited	
	Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
	Flooding Depth to	1.00	Flooding Depth to	1.00	Flooding Depth to	1.00
	saturated zone		saturated zone		saturated zone	1.00
	Content of	1.00	Content of	1.00	Content of	1.00
	organic matter	İ	organic matter	İ	organic matter	İ
	Ponding	1.00	Ponding	1.00	Ponding	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
484A: Greenwood	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00
	Content of organic matter Ponding	1.00	Content of organic matter Ponding	1.00 1.00	Content of organic matter Ponding	1.00 1.00
Beseman	Very limited Depth to saturated zone Content of	 1.00 1.00	saturated zone	 1.00 1.00	saturated zone	 1.00 1.00
	organic matter Subsidence Ponding	 1.00 1.00	Ponding	1.00	!	 1.00 1.00
495B: Karlsborg	 Somewhat limited Depth to saturated zone	 0.98	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	0.98
Grettum	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.35 	 Not limited 	
Perida	 Not limited 	 	Somewhat limited Depth to saturated zone	 0.82 	 Not limited 	
495C: Karlsborg	 Somewhat limited Depth to saturated zone Slope	 0.98 0.04	saturated zone	 1.00 0.04	Depth to	 1.00 0.98
Grettum	 Somewhat limited Slope 	 0.04 	 Somewhat limited Depth to saturated zone Slope	 0.35 0.04	 Very limited Slope 	1.00
Perida	Somewhat limited Slope -	 0.04 	Somewhat limited Depth to saturated zone Slope	 0.82 0.04	 Very limited Slope 	1.00
495D: Karlsborg	 Very limited Slope Depth to saturated zone	 1.00 0.98	saturated zone	 1.00 1.00	 Very limited Slope Depth to saturated zone	1.00
Grettum	 Very limited Slope 	 	 Very limited Slope Depth to saturated zone	 1.00 0.35	 Very limited Slope 	1.00
Perida	 Very limited Slope 	 1.00 	 Very limited Slope Depth to saturated zone	 1.00 0.82	 Very limited Slope 	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia buildings 	al
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u> 	limiting features	<u> </u>	limiting features	1
497A:	 		 		 	
Meenon	Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone		saturated zone	
515A:			 		 	
Manitowish	Not limited	İ	 Very limited	İ	Not limited	i
		ĺ	Depth to	0.99	İ	ĺ
			saturated zone			
521A:			 		 	
Dody	Very limited	Ì	Very limited		Very limited	Ì
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
	Ponding	1.00	Ponding 	1.00	Ponding 	1.00
524E:	į	į		į	į	į
Rock outcrop	Not rated		Not rated		Not rated	
Frogcreek	 Very limited		 Very limited		 Very limited	
_	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
		 	l		Slope	1.00
Metonga	 Very limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Depth to hard	0.42	Depth to hard	1.00	Depth to hard	0.42
	bedrock	l I	bedrock		bedrock	
542B:						
Haugen, very stony	Somewhat limited		Very limited		Somewhat limited	
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone	 	saturated zone		saturated zone	
Haugen	Somewhat limited		 Very limited		Somewhat limited	i
	Depth to	0.39	Depth to	1.00	Depth to	0.39
	saturated zone		saturated zone		saturated zone	
542C:						
Haugen, very stony	!		Very limited		Very limited	
	Depth to	0.39		1.00		1.00
	saturated zone		saturated zone	0.04	Depth to	0.39
	Slope 	0.04	Slope 	0.04	saturated zone	
Haugen	1	İ	 Very limited	İ	 Very limited	į
	Depth to	0.39	: -	1.00	Slope	1.00
	saturated zone		saturated zone	0.04	Depth to	0.39
	Slope 	0.04	Slope 	0.04	saturated zone	
543B:	į	į		į	į	į
Anigon	Not limited		Not limited		Not limited	
543C2:	 		 		 	
Anigon			 Somewhat limited		 Very limited	İ
-	Slope	0.04	'	0.04	Slope	1.00
						İ

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
544F: Menahga	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Mahtomedi	 Very limited Slope	1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
555A: Fordum	 Very limited Flooding Depth to saturated zone Ponding	 	 Very limited Flooding Depth to saturated zone Ponding	 		 1.00 1.00 1.00
574B: Sayner	 Not limited	 	 Not limited	 	 Not limited	
574C: Sayner	 Somewhat limited Slope 	 0.37	 Somewhat limited Slope 	 0.37	 Very limited Slope 	1.00
574E: Sayner	 Very limited Slope	 1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
579B: Parkfalls	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
600A: Haplosaprists	 Not rated 	 	 Not rated 	 	 Not rated 	
Psammaquents615B:	Not rated 	; 	Not rated 	; 	Not rated 	į Į
Cress	 Not limited 		Not limited		 Not limited 	
615C: Cress	 Somewhat limited Slope 	 0.04	 Somewhat limited Slope 	 0.04	 Very limited Slope 	1.00
615D: Cress	 Very limited Slope	 1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
623A: Capitola	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
624A: Ossmer	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
632A: Aftad	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	0.39

Table 18a.--Building Site Development--Continued

Dwellings without basements		Dwellings with basements		Small commercial buildings	
Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Somewhat limited Depth to saturated zone	:	-	!	!	0.39
Somewhat limited Depth to saturated zone Slope	 0.39 0.04	 Very limited Depth to saturated zone Slope	1.00	Slope Depth to	 1.00 0.39
Very limited Slope			'		1.00
Very limited Slope	:	-	!		1.00
Somewhat limited Depth to saturated zone	1		1	1	0.98
Somewhat limited Slope	0.37	Somewhat limited Slope	:	: -	1.00
Somewhat limited Slope	!	!	0.37	 Very limited Slope	1.00
Very limited Slope	:	-	:	: -	1.00
Very limited Slope	1.00	 Very limited Slope	,		1.00
Somewhat limited Depth to saturated zone	 0.39	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	0.39
Somewhat limited Depth to saturated zone		_		•	0.39
	<u> </u>				i
Somewhat limited Depth to saturated zone		_	:	!	0.39
Not limited		Not limited		Not limited	
Not limited	 	Depth to	 0.99	 Not limited 	
	Rating class and limiting features Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Slope Very limited Slope Very limited Slope Somewhat limited Depth to saturated zone Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Very limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Not limited	Rating class and Value limiting features Somewhat limited Depth to 0.39 saturated zone Somewhat limited Depth to 0.39 saturated zone Slope 0.04 Very limited Slope 1.00 Very limited Slope 1.00 Somewhat limited Depth to 0.98 saturated zone Somewhat limited Slope 0.37 Somewhat limited Slope 1.00 Very limited Slope 1.00 Very limited Slope 0.37 Somewhat limited Slope 1.00 Very limited Slope 1.00 Somewhat limited Slope 1.00 Somewhat limited Slope 1.00 Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Somewhat limited Depth to saturated zone Not limited Not li	Rating class and limiting features Value Rating class and limiting features Very limited Depth to saturated zone Somewhat limited Depth to saturated zone Slope Slope Very limited Very limited Slope Very limited Slope Very limited Slope Very limited Slope Somewhat limited Slope Very limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Somewhat limited Slope Slope Very limited Slope Slope Very limited Slope Slope Very limited Slope Slope Very limited Slope Somewhat limited Slope Very limited Slope Somewhat limited Very limited Slope Somewhat limited Very limited Slope Somewhat limited Very limited Somewhat limited Somewhat limited Very limited Somewhat limited Somewhat limited Very limited Somewhat limited Somewhat limited Very limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limited Somewhat limit	Rating class and limiting features Somewhat limited Depth to saturated zone Slope Somewhat limited Slope Somewhat limited Depth to saturated zone Somewhat limited Slope Somewhat limited Depth to saturated zone Somewhat limited Slope Somewhat limited	Rating class and limited Very limited Very limited Slope 1.00 Slope Somewhat limited Very limited

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		 Small commercia buildings	1
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
706A: Winterfield	 Very limited Flooding Depth to saturated zone	 1.00 1.00	 Very limited Flooding Depth to saturated zone	 1.00 1.00		1.00
Totagatic	 Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	 Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	Depth to saturated zone	 1.00 1.00 1.00
724A: Rib	 Very limited Depth to saturated zone Ponding Shrink-swell	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	 1.00 1.00 0.50
Rock outcrop	Not rated		 Not rated		 Not rated	
726B: Sissabagama	 Not limited 	 	 Very limited Depth to saturated zone	 0.99	 Not limited 	
733A: Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	1.00
771A: Lenroot	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	0.39
827A: Scoba	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	0.39
853C: Frogcreek	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Slope	 1.00 1.00
Stinnett	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00
Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
856B: Stinnett	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercial buildings	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
	limiting features	<u> </u>	limiting reatures	<u> </u>	limiting reatures	1
857B: Frogcreek	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
857C:	 				 	İ
Frogcreek	Very limited Depth to saturated zone Slope	 1.00 0.16	Very limited Depth to saturated zone Slope	 1.00 0.16	Very limited Depth to saturated zone Slope	 1.00 1.00
873B:	 		 		 	
Stanberry	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00 	Somewhat limited Depth to saturated zone	0.39
873C: Stanberry	 Somewhat limited Depth to saturated zone Slope	0.39	 Very limited Depth to saturated zone Slope	 1.00 0.37	 Very limited Slope Depth to saturated zone	 1.00 0.39
873D:					 	
Stanberry	Very limited Slope Depth to saturated zone	 1.00 0.39	Very limited Slope Depth to saturated zone	 1.00 1.00	Very limited Slope Depth to saturated zone	1.00
905A: Cublake	 Not limited		 Very limited	!	 Not limited	
	 		Depth to saturated zone	0.99 	 	
926A: Flink	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	
943D:	 		 		 	
Stanberry	Very limited Slope Depth to saturated zone	 1.00 0.39 	Very limited Depth to saturated zone Slope	 1.00 1.00	Very limited Slope Depth to saturated zone	 1.00 0.39
Greenwood	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00
948A: Billyboy	 Somewhat limited Depth to saturated zone	 0.98 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	 0.98
970C: Keweenaw	 Somewhat limited Slope	 0.37	 Somewhat limited Slope	 0.37	 Very limited Slope	1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia buildings	al
	Rating class and	Value	Rating class and limiting features		Rating class and limiting features	Value
970C:	 		 			
Pence	Somewhat limited Slope	0.37	Somewhat limited Slope	0.37	Very limited Slope	1.00
Greenwood	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	saturated zone Content of organic matter	 1.00 1.00 1.00	saturated zone Content of organic matter	 1.00 1.00
970E: Keweenaw	 Very limited Slope	1.00	 Very limited Slope	 1.00	 Very limited Slope	1.00
Pence	 Very limited Slope 	1.00	 Very limited Slope 	 1.00	 Very limited Slope 	1.00
Greenwood	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding	1.00	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00
1070C:	 		 			
Fremstadt	Somewhat limited Slope	0.16	Somewhat limited Slope	 0.16	Very limited Slope	1.00
Cress	Somewhat limited Slope	!	Somewhat limited Slope	0.04	 Very limited Slope	1.00
1070D:	 		 	 	 	
Fremstadt	Very limited Slope	1	Very limited Slope	1	Very limited Slope	1.00
Cress	 Very limited Slope	1.00	 Very limited Slope	1.00	 Very limited Slope	1.00
1080B:	 		 			
Spoonerhill	Somewhat limited Depth to saturated zone	0.39	Very limited Depth to saturated zone	 1.00 	Somewhat limited Depth to saturated zone	0.39
Spoonerhill, stony	 Somewhat limited Depth to saturated zone	0.39	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	0.39
Cress	 Not limited	İ	 Not limited		Not limited	ļ
1653C:	 		 		! 	
Stanberry	Somewhat limited Depth to saturated zone Slope	 0.39 0.04	saturated zone	 1.00 0.04	Very limited Slope Depth to saturated zone	 1.00 0.39
Parkfalls	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements		Small commercial buildings	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1653C: Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
2015: Pits	 Not rated 	 	 Not rated 	 	 Not rated 	
2050: Landfill	 Not rated 	 	 Not rated 	 	 Not rated 	
3011A: Barronett	Very limited Depth to saturated zone Ponding Shrink-swell	 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding Shrink-swell	 1.00 1.00 0.50
3125A: Meehan	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00
3126A: Wurtsmith	 Somewhat limited Depth to saturated zone	 0.39 	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	 0.39
3276A: Au Gres	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
3312B: Glendenning, very stony Glendenning	Depth to saturated zone	1.00	saturated zone	1.00	saturated zone	 1.00 1.00
3336A: Fenander	Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
3403A: Loxley	Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 1.00	Very limited Subsidence Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00 1.00	saturated zone	 1.00 1.00 1.00 1.00

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings witho	ut	Dwellings with basements		Small commercia buildings	1
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3403A: Beseman	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
	saturated zone Content of organic matter Subsidence Ponding	 1.00 1.00 1.00	saturated zone Subsidence Ponding	 1.00 1.00 	saturated zone Content of organic matter Subsidence Ponding	 1.00 1.00 1.00
Dawson	 Very limited Subsidence Depth to saturated zone	 1.00 1.00	 Very limited Subsidence Depth to saturated zone	 1.00 1.00	 Very limited Subsidence Depth to saturated zone	 1.00 1.00
	Content of organic matter Ponding	1.00 1.00	Ponding 	1.00 	Content of organic matter Ponding	1.00 1.00
3424C: Frogcreek	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	1.00
Magroc	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Depth to hard bedrock	 1.00 0.42	Slope 	1.00 1.00
Stinnett	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
Rock outcrop	Not rated 		Not rated 		Not rated 	
3446A: Newson	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
3448B: Grettum	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.35 	 Not limited 	
3448C: Grettum	 Somewhat limited Slope 	 0.04 	 Somewhat limited Depth to saturated zone Slope	 0.35 0.04	 Very limited Slope 	 1.00
3516A: Slimlake	 Not limited 	 	 Very limited Depth to saturated zone	 0.99	 Not limited 	
3629B: Perida	 Not limited 	 	 Somewhat limited Depth to saturated zone	 0.82	 Not limited 	

Table 18a.--Building Site Development--Continued

Map symbol and soil name	Dwellings without basements		Dwellings with basements	Dwellings with basements		1
					<u> </u>	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u></u>	limiting features	<u> </u>	limiting features	1
M-W:					 	
Miscellaneous water	Not rated		Not rated		Not rated	
W:			 		 	
Water	Not rated	j	Not rated	į	Not rated	į

Table 18b.--Building Site Development

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Local roads an	d	 Shallow excavati 	ons	 Lawns and landsca 	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3A:	 		 		 	
Totagatic	Very limited	i	 Very limited	i	Very limited	i
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Subsidence	1.00	Cutbanks cave	1.00	saturated zone	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.80		
	Frost action	0.50	 		 	
Bowstring	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone	İ	saturated zone	İ	Content of	1.00
	Subsidence	1.00	Cutbanks cave	1.00	organic matter	
	Frost action	1.00	Ponding	1.00	Depth to	1.00
	Flooding	1.00	Content of	1.00	saturated zone	
	Ponding	1.00	organic matter		Ponding	1.00
			Flooding	0.80		
Ausable	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Flooding	1.00
	saturated zone		saturated zone		Depth to	1.00
	Subsidence	1.00	Cutbanks cave	1.00	saturated zone	
	Flooding	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	Flooding	0.80		
	Frost action	0.50	 		 	
22A:	 		 		 	
Comstock	Very limited	İ	Very limited	İ	Very limited	Ì
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
	Shrink-swell	0.50	 		 	
24A:	 		 		 	
Poskin	Very limited	į	Very limited	į	Very limited	İ
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	1.00	Cutbanks cave	1.00		
	Low strength	1.00				
27A:	 		 		 	
Scott Lake	Somewhat limited	İ	 Very limited	İ	Somewhat limited	İ
	Frost action	0.50	Cutbanks cave	1.00	Droughty	0.01
			Depth to	0.99		
			saturated zone			
28B:	 		 		 	
Haugen, very stony	Somewhat limited	i	 Very limited	i	Somewhat limited	i
	Frost action	0.50	Depth to	1.00	Depth to	0.19
	Depth to	0.19		į	saturated zone	i
	saturated zone	I	Cutbanks cave	1.00	Content of large	0 03
	Dataracea rone		Cucbanks cave	1	concent of farge	10.03

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavati 	ons	Lawns and landscaping 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
28B: Haugen	 Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Somewhat limited Depth to saturated zone Content of large stones	0.19
Rosholt, very stony	 Somewhat limited Frost action 	 0.50 	 Very limited Cutbanks cave 	 1.00 		 0.02 0.01
Rosholt	 Somewhat limited Frost action 	 0.50 	 Very limited Cutbanks cave 	 1.00	 Somewhat limited Droughty 	0.01
28C:		ļ		ļ		ļ
Haugen, very stony	Somewhat limited Frost action Depth to saturated zone Slope	 0.50 0.19 0.04	saturated zone Cutbanks cave	 1.00 1.00 0.04	Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.03
Haugen	Somewhat limited Frost action Depth to saturated zone Slope	 0.50 0.19 0.04	Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 0.04	Somewhat limited Depth to saturated zone Slope Content of large stones	0.19
Rosholt, very stony	 Somewhat limited Frost action Slope 	 0.50 0.04 	 Very limited Cutbanks cave Slope 	 1.00 0.04 	 Somewhat limited Slope Droughty Content of large stones	 0.04 0.02 0.01
Rosholt	 Somewhat limited Frost action Slope 	 0.50 0.04	 Very limited Cutbanks cave Slope 	 1.00 0.04	 Somewhat limited Slope Droughty 	0.04
33B: Chetek	 Not limited 	 	 Very limited Cutbanks cave 	 1.00 	 Somewhat limited Droughty Content of large stones	 0.61 0.01
33C: Chetek	 Somewhat limited Slope 	 0.04 	 Very limited Cutbanks cave Slope 	 1.00 0.04 		 0.61 0.04 0.01
38A: Rosholt	 Somewhat limited Frost action	 0.50	 Very limited Cutbanks cave	 1.00	 Somewhat limited Droughty 	0.01
38B: Rosholt	 Somewhat limited Frost action 	 0.50 	 Very limited Cutbanks cave 	 1.00 	 Somewhat limited Droughty 	 0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	ıd	 Shallow excavati 	ons	 Lawns and landsca 	ping
	Rating class and limiting features	1	Rating class and limiting features		Rating class and limiting features	Value
38C: Rosholt	 Somewhat limited Frost action Slope	 0.50 0.04	!	 1.00 0.04		 0.04 0.01
38D: Rosholt	 Very limited Slope Frost action	1.00	 Very limited Cutbanks cave Slope	1	 Very limited Slope Droughty	 1.00 0.01
42D: Amery	 Very limited Slope Frost action	 1.00 0.50	!	 1.00 1.00	: -	1.00
43B: Antigo	•		: -	 1.00	 Not limited 	
43C: Antigo	 Somewhat limited Frost action Slope	0.50	1	 1.00 0.37	: -	0.37
43D: Antigo	 Very limited Slope Frost action	1.00	Slope	 1.00 1.00	:	1.00
48A: Brill	 Very limited Frost action Low strength Depth to saturated zone	1.00	!	1	 Somewhat limited Depth to saturated zone	 0.75
63A: Crystal Lake	 Very limited Frost action Low strength Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.19	: -	1	 Somewhat limited Depth to saturated zone 	 0.19
63B: Crystal Lake	 Very limited Frost action Low strength Shrink-swell Depth to saturated zone	 1.00 1.00 0.50 0.19	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00 	 Somewhat limited Depth to saturated zone 	 0.19
63C: Crystal Lake	Very limited Frost action Low strength Shrink-swell Depth to saturated zone Slope	 1.00 1.00 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 0.04	saturated zone	 0.19 0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
63E: Crystal Lake	 Very limited Slope Frost action Low strength	 1.00 1.00	Cutbanks cave	 1.00 1.00 0.99	 Very limited Slope 	 1.00
64A:	Shrink-swell	0.50	saturated zone		 	
64A: Totagatic		 1.00 1.00 1.00 1.00 0.50	saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00 0.80	Depth to saturated zone	 1.00 1.00 1.00
Winterfield	Very limited Depth to saturated zone Flooding	 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 0.80	Depth to	 1.00 1.00 0.50
69B: Keweenaw	 Not limited 		 Very limited Cutbanks cave 	 1.00 	 Somewhat limited Droughty Content of large stones	 0.06 0.01
Sayner	 Not limited 	 	 Very limited Cutbanks cave 	 1.00 	 Somewhat limited Droughty Content of large stones	 0.94 0.05
Vilas	 Not limited 		 Very limited Cutbanks cave 	1.00	 Somewhat limited Droughty 	0.42
69C: Keweenaw	 Somewhat limited Slope 	 0.16 	 Very limited Cutbanks cave Slope 	 1.00 0.16 	-	 0.16 0.06 0.01
Sayner	 Somewhat limited Slope 	 0.16 	 Very limited Cutbanks cave Slope 	 1.00 0.16 		 0.94 0.16 0.05
Vilas	 Somewhat limited Slope 	 0.16 	 Very limited Cutbanks cave Slope 	 1.00 0.16	 Somewhat limited Droughty Slope 	 0.42 0.16
69E: Keweenaw	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave	 1.00 1.00 	 Very limited Slope Droughty Content of large stones	 1.00 0.06 0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	 Local roads an streets 	d	 Shallow excavati 	ons	Lawns and landscaping		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
69E: Sayner	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00	 Very limited Slope Droughty Content of large stones	 1.00 0.94 0.05	
Vilas	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00	 Very limited Slope Droughty 	 1.00 0.42	
74B: Vilas	 Not limited 	 	 Very limited Cutbanks cave	1.00	 Somewhat limited Droughty 	 0.42	
74C: Vilas	 Somewhat limited Slope 	 0.37 	 Very limited Cutbanks cave Slope	 1.00 0.37	 Somewhat limited Droughty Slope	 0.42 0.37	
74D: Vilas	 Very limited Slope 	 1.00	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Droughty	 1.00 0.42	
100B: Menahga	 Not limited 	 	 Very limited Cutbanks cave	 1.00	 Somewhat limited Droughty Too sandy	0.93	
100C: Menahga	 Somewhat limited Slope 	 0.04	 Very limited Cutbanks cave Slope	 1.00 0.04	 Somewhat limited Droughty Slope	 0.51 0.04	
100D: Menahga	 Very limited Slope 	 1.00	 Very limited Cutbanks cave Slope	 1.00 1.00	 Very limited Slope Droughty	 1.00 0.51	
127D: Amery	 Very limited Slope Frost action	 1.00 0.50	 Very limited Cutbanks cave Slope	 1.00 1.00	 Very limited Slope Content of large stones	 1.00 0.03	
Rosholt	 Very limited Slope Frost action 	 1.00 0.50 	•	 1.00 1.00 	Very limited Slope Droughty Content of large stones	 1.00 0.02 0.01	
127E: Amery	 Very limited Slope Frost action	 1.00 0.50	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Content of large stones	 1.00 0.03	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavati 	ons	Lawns and landscaping		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
127E: Rosholt	 Very limited Slope Frost action 	 1.00 0.50	 Very limited Slope Cutbanks cave 	 1.00 1.00	 Very limited Slope Droughty Content of large stones	 1.00 0.02 0.01	
156B: Magnor, very stony	Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10	 Very limited Depth to saturated zone Content of large stones	 1.00 0.01	
Magnor	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10	 Very limited Depth to saturated zone	1.00	
157B: Freeon, very stony	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10	 Very limited Depth to saturated zone 	 1.00 	
Freeon		 1.00 0.50	Very limited Depth to saturated zone Dense layer Cutbanks cave	 1.00 0.50 0.10		 1.00 0.01	
157C: Freeon, very stony	 Very limited Depth to saturated zone Frost action Slope	 1.00 0.50 0.04	 Very limited Depth to saturated zone Dense layer Cutbanks cave Slope	 1.00 0.50 0.10 0.04	 Very limited Depth to saturated zone Slope 	 1.00 0.04	
Freeon	Very limited Depth to saturated zone Frost action Slope	 1.00 0.50 0.04	saturated zone Dense layer	 1.00 0.50 0.10 0.04	saturated zone Slope Content of large	 1.00 0.04 0.01	
160A: Oesterle	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Very limited Depth to saturated zone 	1.00	
182B: Padus	 Somewhat limited Frost action	 0.50	 Very limited Cutbanks cave	 1.00	 Not limited 		

Table 18b.--Building Site Development--Continued

Map symbol and soil name	 Local roads an streets 	d	 Shallow excavati 	ons	 Lawns and landsca 	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182C: Padus	 Somewhat limited Frost action Slope	 0.50 0.37	 Very limited Cutbanks cave Slope	 1.00 0.37	 Somewhat limited Slope	
192A: Worcester	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Very limited Depth to saturated zone	 1.00
193A: Minocqua	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
215B: Pence	 Not limited 	 	 Very limited Cutbanks cave 	 1.00 		0.30
215C: Pence	 Somewhat limited Slope 	 0.37 	 Very limited Cutbanks cave Slope 	 1.00 0.37 		 0.37 0.30 0.01
215D: Pence	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00 	 Very limited Slope Droughty Content of large stones	 1.00 0.30 0.01
315A: Rib	 Very limited Depth to saturated zone Frost action Low strength Ponding Shrink-swell	 1.00 1.00 1.00 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
337A: Plover	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Very limited Depth to saturated zone	 1.00
368B: Mahtomedi	 Not limited 	 	 Very limited Cutbanks cave	 1.00	 Very limited Droughty	1.00
Cress	 Not limited 	 	 Very limited Cutbanks cave 	 1.00	 Somewhat limited Droughty 	0.13

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavations 		 Lawns and landscaping 	
	Rating class and limiting features	Value	Rating class and limiting features	'	Rating class and limiting features	Value
368C: Mahtomedi	 Somewhat limited Slope	'	 Very limited Cutbanks cave Slope	'	 Very limited Droughty Slope	 1.00 0.04
Cress	 Somewhat limited Slope 	1	 Very limited Cutbanks cave Slope	 1.00 0.04		0.13
368D: Mahtomedi	 Very limited Slope 	'	 Very limited Cutbanks cave Slope	 1.00 1.00	:	1.00
Cress	 Very limited Slope 	 1.00 	 Very limited Cutbanks cave Slope	 1.00 1.00	:	 1.00 0.13
371A: Croswell	 Somewhat limited Depth to saturated zone	 0.19 	 Very limited Depth to saturated zone Cutbanks cave	1	Somewhat limited Droughty Depth to saturated zone	 0.54 0.19
380B: Cress	 Not limited	 	 Very limited Cutbanks cave	:	 Somewhat limited Droughty	0.13
Rosholt	 Somewhat limited Frost action	 0.50	 Very limited Cutbanks cave	1.00	 Somewhat limited Droughty	0.01
380C: Cress	 Somewhat limited Slope 	 0.04	 Very limited Cutbanks cave Slope	 1.00 0.04		 0.13 0.04
Rosholt	 Somewhat limited Frost action Slope 	:	 Very limited Cutbanks cave Slope	1.00	 Somewhat limited Slope Droughty 	 0.04 0.01
380D: Cress			 Very limited Cutbanks cave Slope		 Very limited Slope Droughty	 1.00 0.13
Rosholt	 Very limited Slope Frost action	 1.00 0.50	 Very limited Cutbanks cave Slope	 1.00 1.00	:	 1.00 0.01
383B: Mahtomedi	 Not limited 	 	 Very limited Cutbanks cave	 1.00	 Very limited Droughty	1.00
383C: Mahtomedi	 Somewhat limited Slope 	 0.04 	 Very limited Cutbanks cave Slope	 1.00 0.04		 1.00 0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	Shallow excavati	ons	Lawns and landsca	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
383D: Mahtomedi	 Very limited Slope 	 1.00	!	 1.00 1.00	 Very limited Slope Droughty	 1.00 1.00
396B: Friendship	 Not limited - 	 	!	 1.00 0.35		 0.91 0.50
Wurtsmith	 Somewhat limited Depth to saturated zone 	 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Somewhat limited Droughty Too sandy Depth to saturated zone	 0.87 0.50 0.19
Grayling	 Not limited 	 	 Very limited Cutbanks cave 	 1.00 	 Very limited Droughty Too sandy	 1.00 0.50
397A: Perchlake	 Very limited Depth to saturated zone	 1.00 	saturated zone	 1.00 1.00	saturated zone	 1.00 0.36
399B: Grayling	 Not limited 	 	 Very limited Cutbanks cave	 1.00	 Very limited Droughty Too sandy	1.00
399C: Grayling	 Somewhat limited Slope 	 0.04 	l .	 1.00 0.04		 1.00 0.50 0.04
399D: Grayling	 Very limited Slope 	 1.00 	 Very limited Cutbanks cave Slope	 1.00 1.00	 Very limited Droughty Slope Too sandy	 1.00 1.00 0.50
405A: Lupton	 Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00	saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00
Cathro	 Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00	saturated zone Ponding Content of	 1.00 1.00 1.00 0.10	 Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	Shallow excavati	ons	Lawns and landsca	aping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
405A: Tawas	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Content of	1.00
	saturated zone Subsidence	1.00	saturated zone Cutbanks cave	1.00	organic matter Depth to	1.00
	Frost action Ponding 	1.00 1.00 	Ponding Content of organic matter	1.00 1.00 	saturated zone Ponding	1.00
406A: Loxley	 Very limited		 Very limited		 Very limited	
Lowicy	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence Frost action	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding 	1.00 	Ponding Cutbanks cave 	1.00 0.10 	Ponding 	1.00
407A: Seelyeville	 Very limited	j I	 Very limited	į į	 Very limited	İ
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Content of organic matter	1.00
	Subsidence Frost action	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding 	1.00 	Ponding Cutbanks cave 	1.00 0.10	Ponding 	1.00
Markey	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00	 Very limited Content of organic matter	1.00
	Frost action Ponding 	1.00 1.00 	Cutbanks cave Ponding Content of	1.00 1.00 1.00	Depth to saturated zone Ponding	1.00 1.00
410A:	 	 	organic matter		 	
Seelyeville	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00	 Very limited Content of organic matter	1.00
	Subsidence Frost action	1.00	Content of organic matter	1.00	Depth to saturated zone	1.00
	Ponding 	1.00	Ponding Cutbanks cave	1.00	Ponding 	1.00
Cathro	 Very limited Depth to	1.00	 Very limited Depth to	1.00	 Very limited Content of	1.00
	saturated zone Subsidence	1.00	saturated zone Ponding	1.00	organic matter Depth to	1.00
	Frost action Ponding 	1.00 1.00 	Content of organic matter Cutbanks cave	1.00 0.10	saturated zone Ponding	1.00
412A:	 		 		 	ļ
Rifle	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
	saturated zone Frost action Ponding	 1.00 1.00	Saturated zone Content of organic matter	1.00	Ponding	1.00
	 		Ponding Cutbanks cave	1.00	 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	Shallow excavati 	ons	Lawns and landsca	aping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	1
412A:						
Tacoosh	Very limited		Very limited		Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone Subsidence		saturated zone		saturated zone	
	Subsidence Frost action	1.00	Ponding Content of	1.00	Ponding	1.00
	Ponding	1.00	organic matter	1	 	i
			Cutbanks cave	0.10		į
415A:	 		 		 	
Greenwood	 Very limited	i	 Very limited	į	Very limited	i
	Depth to	1.00	Depth to	1.00	Content of	1.00
	saturated zone		saturated zone		organic matter	
	Subsidence	1.00	Content of	1.00	Depth to	1.00
	Frost action Ponding	1.00	organic matter Ponding	1.00	saturated zone Ponding	1.00
			Cutbanks cave	0.10	ronaing	
439B:	 		 		 	
Graycalm	Not limited	i	 Very limited	i	Somewhat limited	i
		į	Cutbanks cave	1.00	Droughty	0.29
Menahga	 Not limited		 Very limited		 Somewhat limited	
-	į	į	Cutbanks cave	1.00	Droughty	0.49
439C:	 		 		 	
Graycalm	Somewhat limited	į	Very limited	į	Somewhat limited	j
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.29
	 		Slope	0.04	Slope	0.04
Menahga	Somewhat limited		 Very limited		Somewhat limited	
	Slope	0.04	Cutbanks cave	1.00	Droughty	0.49
	 		Slope	0.04	Slope	0.04
439D:		İ				
Graycalm	: -		Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope Droughty	1.00
			blope		Droughey	
Menahga	Very limited	[Very limited		Very limited	
	Slope	1.00	Cutbanks cave	1.00	Slope	1.00
	 		Slope 	1.00	Droughty 	0.49
441C:		į				į
Freeon	: -	1	Very limited	1	Very limited	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	0.50	•	0.50	Slope	0.37
	Slope	0.37	:	0.37	<u> </u>	i
		į	Cutbanks cave	0.10		į
Cathro	 Very limited		 Very limited		 Not rated	
	Depth to	1.00		1.00	!	
	saturated zone		saturated zone			1
	Subsidence Frost action	1.00		1.00	 	1
	Ponding	1.00		1	1 	1
		,	maccol	0.10	I .	1

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavati 	ons	Lawns and landsca	Lawns and landscaping 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
442C: Haugen	 Somewhat limited	 	 Very limited	 	 Somewhat limited	 	
	Frost action Depth to saturated zone	0.50 0.19 	Depth to saturated zone Cutbanks cave	1.00 1.00 	Depth to saturated zone Content of large stones	0.19 0.03	
Greenwood	 Very limited Depth to saturated zone Frost action	 1.00 1.00	Very limited Depth to saturated zone Content of	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	
	Ponding 	1.00 	organic matter Ponding Cutbanks cave	 1.00 0.10	 	 	
443D: Amery	 Very limited Slope Frost action	 1.00 0.50	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Content of large stones	 1.00 0.03	
Greenwood	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding Cutbanks cave	 1.00 1.00 1.00 0.10	 Very limited Depth to saturated zone Ponding 	 1.00 1.00 	
461A: Bowstring	 Very limited Depth to saturated zone Subsidence Frost action Flooding Ponding	 1.00 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Content of organic matter Flooding	 1.00 1.00 1.00 1.00 0.80	Content of	 1.00 1.00 1.00 1.00	
484A: Greenwood	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00	saturated zone	 1.00 1.00	
Beseman	 Very limited Depth to saturated zone Frost action Subsidence Ponding	 1.00 1.00 1.00	saturated zone Ponding Content of	0.10 1.00 1.00 1.00 1.00	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		 Shallow excavati 	ons	Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
495B: Karlsborg	 Somewhat limited Depth to saturated zone	 0.75	 Very limited Depth to saturated zone	 1.00	 Somewhat limited Depth to saturated zone	 0.75
	Frost action	0.50	•	1.00	Droughty	0.26
Grettum	 Not limited 		 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.35	Somewhat limited Droughty 	0.61
Perida	 Somewhat limited Frost action 	 0.50 	 Very limited Cutbanks cave Too clayey Depth to saturated zone	 1.00 1.00 0.82	 Somewhat limited Droughty 	 0.44
495C:		İ		i		i
Karlsborg	Somewhat limited Depth to saturated zone	0.75	 Very limited Depth to saturated zone	1.00	Somewhat limited Depth to saturated zone	0.75
	Frost action Slope 	0.50 0.04 	Too clayey Cutbanks cave Slope	1.00 1.00 0.04	Droughty Slope 	0.26 0.04
Grettum	Somewhat limited Slope 	0.04	Very limited Cutbanks cave Depth to saturated zone Slope	 1.00 0.35 0.04	Somewhat limited Droughty Slope	 0.61 0.04
Perida	 Somewhat limited Frost action Slope 	 0.50 0.04 	!	 1.00 1.00 0.82 0.04	:	 0.44 0.04
	!		[ļ	!	
495D: Karlsborg	 Very limited Slope Depth to	 1.00 0.75	 Very limited Depth to saturated zone	 1.00	 Very limited Slope Depth to	 1.00 0.75
	saturated zone Frost action	0.50	Too clayey Cutbanks cave	1.00 1.00 1.00	saturated zone Droughty	0.26
Grettum	 Very limited Slope 	 1.00 	 Very limited Cutbanks cave Slope Depth to saturated zone	 1.00 1.00 0.35	:	 1.00 0.61
Perida	 Very limited Slope Frost action 	 1.00 0.50 	!	 1.00 1.00 1.00 0.82	 Very limited Slope Droughty 	 1.00 0.44

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an streets	d	 Shallow excavati 	ons	Lawns and landscaping 	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
497A: Meenon	Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Too clayey Cutbanks cave	 1.00 1.00 1.00	Very limited Depth to saturated zone Droughty	 1.00 0.41
515A: Manitowish	 Not limited 	 	 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.99 	 Somewhat limited Droughty Content of large stones	 0.17 0.01
521A:	 				 	
Dody	Very limited Depth to saturated zone Frost action Low strength Shrink-swell Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Too clayey Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding 	 1.00 1.00
524E:						
Rock outcrop	Not rated		Not rated		Not rated	
Frogcreek	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	 Very limited Depth to saturated zone 	 1.00
Metonga	 Very limited Slope Frost action Depth to hard bedrock	 1.00 0.50 0.42	 Very limited Depth to hard bedrock Slope Cutbanks cave	 1.00 1.00 0.10	Very limited Slope Depth to bedrock Content of large stones	
542B:	 		 		 	
Haugen, very stony	Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.03
Haugen		 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00		 0.19 0.03
542C: Haugen, very stony	 Somewhat limited Frost action Depth to saturated zone Slope	 0.50 0.19 0.04	 Very limited Depth to saturated zone Cutbanks cave Slope	 1.00 1.00 0.04	 Somewhat limited Depth to saturated zone Slope Content of large stones	 0.19 0.04 0.03

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavati 	ons	Lawns and landsca	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
542C: Haugen	 Somewhat limited Frost action Depth to saturated zone Slope	 0.50 0.19 0.04	saturated zone Cutbanks cave	 1.00 1.00 0.04	 Somewhat limited Depth to saturated zone Slope Content of large	 0.19 0.04 0.03
543B: Anigon	 - Somewhat limited Frost action Low strength	 0.50 0.22	 Very limited Cutbanks cave	 1.00	stones Not limited	
543C2: Anigon	i I	 0.50 0.22 0.04	 Very limited Cutbanks cave Slope	 1.00 0.04	 Somewhat limited Slope 	 0.04
544F: Menahga	 Very limited Slope 	 1.00	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Droughty	 1.00 0.51
Mahtomedi	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Droughty	 1.00 1.00
555A: Fordum	 Very limited Depth to saturated zone Frost action Flooding Ponding	 1.00 1.00 1.00	saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00 0.80	 Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00
574B: Sayner	 Not limited 		 Very limited Cutbanks cave	 1.00 	 Somewhat limited Droughty Content of large stones	0.94
574C: Sayner	 Somewhat limited Slope 	0.37	 Very limited Cutbanks cave Slope 	 1.00 0.37 	Somewhat limited Droughty Slope Content of large stones	 0.94 0.37 0.01
574E: Sayner	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00	 Very limited Slope Droughty Content of large stones	 1.00 0.94 0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavati	ons	Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
579B: Parkfalls	Very limited Depth to saturated zone Frost action	 1.00 1.00	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	saturated zone Content of large	 1.00 0.01
600A: Haplosaprists	Not rated		 Not rated	 	 Not rated	İ
Psammaquents	Not rated	 	 Not rated 	 	 Not rated 	
615B: Cress	Not limited		 Very limited Cutbanks cave	1.00	 Somewhat limited Droughty 	 0.13
615C: Cress	Somewhat limited Slope	 0.04 	 Very limited Cutbanks cave Slope	 1.00 0.04		 0.13 0.04
615D: Cress	Very limited Slope	 1.00	 Very limited Cutbanks cave Slope	 1.00 1.00	 Very limited Slope Droughty	 1.00 0.13
623A: Capitola	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Dense layer Cutbanks cave	 1.00 1.00 0.50 0.10	 Very limited Depth to saturated zone Ponding	 1.00 1.00
624A: Ossmer	Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Very limited Depth to saturated zone 	 1.00
632A: Aftad	Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Somewhat limited Depth to saturated zone	 0.19
632B: Aftad	Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	· -	 1.00 1.00	 Somewhat limited Depth to saturated zone	 0.19
632C: Aftad	Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 0.04	-	 1.00 1.00 0.04	 Somewhat limited Depth to saturated zone Slope	 0.19 0.04

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	đ	 Shallow excavati 	ons	Lawns and landsca	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
633F: Pence	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave	 1.00 1.00 	<u>-</u>	 1.00 0.30 0.01
Padus	 Very limited Slope Frost action	 1.00 0.50	-	 1.00 1.00	<u>-</u>	1.00
648B: Sconsin	 Somewhat limited Depth to saturated zone Frost action	 0.75 0.50	saturated zone	 1.00 1.00 0.50	saturated zone	0.75
670C: Keweenaw	 Somewhat limited Slope 	 0.37 	 Very limited Cutbanks cave Slope 	 1.00 0.37		 0.37 0.05 0.01
Pence	 Somewhat limited Slope 	 0.37 	 Very limited Cutbanks cave Slope 	 1.00 0.37 		 0.37 0.30 0.05
670E: Keweenaw	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00 	<u>-</u>	 1.00 0.05 0.01
Pence	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave 	 1.00 1.00 		 1.00 0.30 0.05
671B: Spoonerhill, stony	 Somewhat limited Depth to saturated zone 	 0.19 	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	Depth to saturated zone	 0.42 0.19 0.05
Spoonerhill	 Somewhat limited Depth to saturated zone 	 0.19 	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	Depth to saturated zone	 0.42 0.19 0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavati 	ons	Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Stanberry, stony	 Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	 Somewhat limited Depth to saturated zone Content of large stones	 0.19 0.01
Pence, stony	 Not limited 	 	 Very limited Cutbanks cave 	 1.00 	 Somewhat limited Droughty Content of large stones	 0.30 0.01
683A: Tipler	 Somewhat limited Frost action 	 0.50 	 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.99 	 Not limited 	
706A: Winterfield	 Very limited Depth to saturated zone Flooding	 1.00 1.00	 Very limited Depth to saturated zone Cutbanks cave Flooding	 1.00 1.00 0.80	 Very limited Flooding Depth to saturated zone Droughty	 1.00 1.00 0.10
Totagatic	 Very limited Depth to saturated zone Flooding Ponding Frost action	 1.00 1.00 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Ponding Flooding	 1.00 1.00 1.00 0.80	 Very limited Flooding Depth to saturated zone Ponding Droughty	 1.00 1.00 1.00 0.37
724A: Rib	 Very limited Depth to saturated zone Frost action Low strength Ponding Shrink-swell	 1.00 1.00 1.00 1.00	 Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding 	 1.00 1.00
Rock outcrop	 Not rated 	 	 Not rated 	 	 Not rated 	
726B: Sissabagama	 Not limited 	 	 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.99 	 Somewhat limited Droughty 	 0.42
733A: Wozny	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Cutbanks cave Ponding Dense layer	 1.00 1.00 1.00 0.50	 Very limited Depth to saturated zone Ponding 	 1.00 1.00

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		Shallow excavati 	Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
771A: Lenroot	 Somewhat limited Depth to saturated zone	 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	Depth to	 0.99 0.19	
827A: Scoba	 Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	: -	 1.00 1.00	 Somewhat limited Depth to saturated zone	 0.19 	
853C: Frogcreek	 Very limited Depth to saturated zone Frost action	 1.00 0.50	saturated zone	 1.00 1.00 0.50	saturated zone	 1.00 	
Stinnett	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	saturated zone	 1.00 	
Wozny	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	saturated zone Cutbanks cave	 1.00 1.00 1.00 0.50	saturated zone Ponding	 1.00 1.00 	
856B: Stinnett	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	saturated zone	 1.00 	
857B: Frogcreek	 Very limited Depth to saturated zone Frost action	 1.00 0.50	saturated zone	 1.00 1.00 0.50	 Very limited Depth to saturated zone	 1.00 	
857C: Frogcreek	 Very limited Depth to saturated zone Frost action Slope	 1.00 0.50 0.16	saturated zone Cutbanks cave	 1.00 1.00 0.50 0.16	 Very limited Depth to saturated zone Slope	 1.00 0.16 	
873B: Stanberry	 Somewhat limited Frost action Depth to saturated zone	 0.50 0.19 	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50		 0.19 0.01 	

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and		 Shallow excavati 	ons	 Lawns and landsca 	aping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features		limiting features	<u> </u>
873C:	Ī		l I		 	
Stanberry	 Somewhat limited		 Very limited		 Somewhat limited	i
	Frost action	0.50	Depth to	1.00	Slope	0.37
	Slope	0.37	saturated zone	İ	Depth to	0.19
	Depth to	0.19	Cutbanks cave	1.00	!	
	saturated zone		Dense layer	0.50	:	0.01
			Slope	0.37	stones	1
873D:				İ		i
Stanberry	Very limited	į	Very limited	İ	Very limited	į
	Slope	1.00	Slope	1.00	Slope	1.00
	Frost action	0.50	Depth to	1.00		0.19
	Depth to saturated zone	0.19	saturated zone Cutbanks cave	1.00	saturated zone Content of large	
	saturated zone		Dense layer	0.50	stones	10.01
						i
905A:	İ	į	İ	İ	İ	į
Cublake	Not limited		Very limited	1	Somewhat limited	
			Cutbanks cave	1.00	Droughty	0.61
	 		Depth to saturated zone	0.99	 	
	 		Bacuraced Zone		 	i
926A:	İ	i		İ	İ	i
Flink	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	· -	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Frost action	0.50	Cutbanks cave	1.00	Droughty 	0.64
943D:		i		į		i
Stanberry	Very limited		Very limited		Very limited	
	Slope	1.00	: -	1.00	Slope	1.00
	Frost action Depth to	0.50	saturated zone Cutbanks cave	1.00	Depth to saturated zone	0.19
	saturated zone	0.19	Slope	1.00	1	0.01
		i	Dense layer	0.50	:	
Greenwood	· -	1	Very limited	'	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Frost action	1.00	Content of	1.00	!	1.00
	Ponding	1.00	organic matter	į		i
			Ponding	1.00		
			Cutbanks cave	0.10		
948A:	 		 	1	 	
Billyboy	Somewhat limited		 Very limited		 Somewhat limited	i
	Depth to	0.75		1.00	Depth to	0.75
	saturated zone		saturated zone	İ	saturated zone	
	Frost action	0.50	Cutbanks cave	1.00		
970C:	 		 	 	 	
Keweenaw	Somewhat limited		 Very limited		 Somewhat limited	
	Slope	0.37	Cutbanks cave	1.00	Slope	0.37
	[Slope	0.37		0.05
					Content of large	0.01
		1			stones	1

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	 Shallow excavati 	ons	 Lawns and landsca 	ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
970C: Pence	 Somewhat limited Slope 	0.37	 Very limited Cutbanks cave Slope 	 1.00 0.37 		 0.37 0.30 0.01
Greenwood	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding Cutbanks cave	 1.00 1.00 1.00 0.10	Not rated 	
970E: Keweenaw	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave	 1.00 1.00 		 1.00 0.05 0.01
Pence	 Very limited Slope 	 1.00 	 Very limited Slope Cutbanks cave	 1.00 1.00 	-	 1.00 0.30 0.01
Greenwood	 Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	saturated zone	 1.00 1.00 1.00 0.10	Not rated	
1070C: Fremstadt	 Somewhat limited Slope 	 0.16	 Very limited Cutbanks cave Slope	 1.00 0.16	: -	0.16
Cress	 Somewhat limited Slope 	 0.04 	 Very limited Cutbanks cave Slope 	 1.00 0.04		0.13
1070D: Fremstadt	 Very limited Slope 	 1.00	 Very limited Slope Cutbanks cave	 1.00 1.00	 Very limited Slope Droughty	1.00
Cress	 Very limited Slope 	 1.00 	 Very limited Cutbanks cave Slope 	 1.00 1.00	· -	 1.00 0.13
1080B: Spoonerhill	 Somewhat limited Depth to saturated zone 	 0.19 	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	'	 0.42 0.19 0.01

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		Shallow excavations		Lawns and landscaping	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1080B: Spoonerhill, stony	 Somewhat limited Depth to saturated zone 	 0.19 	saturated zone Cutbanks cave	1.00	Depth to saturated zone	 0.42 0.19 0.05
Cress	 Not limited 		 Very limited Cutbanks cave	1.00	 Somewhat limited Droughty	0.13
1653C: Stanberry	 Somewhat limited Frost action Depth to saturated zone Slope		Cutbanks cave	1.00	saturated zone Slope Content of large	 0.19 0.04 0.01
Parkfalls	 Very limited Depth to saturated zone Frost action		saturated zone Cutbanks cave	!		 1.00 0.01
Wozny	 Very limited Depth to saturated zone Frost action Ponding	1.00	saturated zone Cutbanks cave Ponding	1.00	saturated zone	 1.00 1.00
2015: Pits	 Not rated		 Not rated		 Not rated	
2050: Landfill	 Not rated		 Not rated		 Not rated	
3011A: Barronett	 Very limited Depth to saturated zone Frost action Low strength Ponding Shrink-swell	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding 	 1.00 1.00
3125A: Meehan	 Very limited Depth to saturated zone 	 1.00 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	saturated zone	 1.00 0.88
3126A: Wurtsmith	 Somewhat limited Depth to saturated zone 	 0.19 	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Somewhat limited Droughty Depth to saturated zone	 0.83 0.19

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads and streets		 Shallow excavati 	ons	Lawns and landsca	ping
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features		limiting features	
3276A: Au Gres	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone Cutbanks cave	 1.00 1.00	 Very limited Depth to saturated zone Droughty	 1.00 0.09
		i				
3312B: Glendenning, very stony	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Very limited Depth to saturated zone Content of large stones	1.00
Glendenning	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave	 1.00 0.10	Very limited Depth to saturated zone Content of large stones	 1.00 0.01
3336A:			 		 	
Fenander	Very limited Depth to saturated zone Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00
3403A:						
Loxley	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Content of organic matter Ponding Cutbanks cave	 1.00 1.00 1.00 0.10	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00
Beseman	 Very limited Depth to saturated zone Frost action Subsidence Ponding	 1.00 1.00 1.00		 1.00 1.00 1.00 0.10		 1.00 1.00 1.00
Dawson	Very limited Depth to saturated zone Subsidence Frost action Ponding	 1.00 1.00 1.00 1.00	Very limited Depth to saturated zone Cutbanks cave Ponding Content of organic matter	 1.00 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
3424C: Frogcreek	 Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	 Very limited Depth to saturated zone 	1.00

Table 18b.--Building Site Development--Continued

Map symbol and soil name	Local roads an	d	Shallow excavations		Shallow excavations Lawns and landscapin		ping
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
3424C: Magroc	Very limited Depth to saturated zone Frost action	 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Dense layer Depth to hard bedrock	 1.00 1.00 0.50 0.42	Very limited Depth to saturated zone Content of large stones	 1.00 0.03	
Stinnett	 Very limited Depth to saturated zone Frost action	 1.00 0.50	Very limited Depth to saturated zone Cutbanks cave Dense layer	 1.00 1.00 0.50	 Very limited Depth to saturated zone 	 1.00 	
Rock outcrop	 Not rated	 	 Not rated	 	 Not rated		
3446A: Newson	 Very limited Depth to saturated zone Ponding Frost action	 1.00 1.00 0.50	 Very limited Depth to saturated zone Cutbanks cave Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	
3448B: Grettum	 Not limited 	 	 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.35	 Somewhat limited Droughty 	0.61	
3448C: Grettum	 Somewhat limited Slope 	 0.04 	 Very limited Cutbanks cave Depth to saturated zone Slope	 1.00 0.35 0.04		0.61	
3516A: Slimlake	 Not limited 	 	 Very limited Cutbanks cave Depth to saturated zone	 1.00 0.99	 Somewhat limited Droughty 	 0.21 	
3629B: Perida	 Somewhat limited Frost action 	 0.50 	!	 1.00 1.00 0.82	 Somewhat limited Droughty 	0.44	
M-W: Miscellaneous water	 Not rated	 	Not rated		 Not rated		
W: Water	 Not rated 	 	 Not rated 	 	 Not rated 	 	

Table 19a.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Septic tank		Sewage lagoons	
and soil name	absorption fiel	ds	I	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
3A:			 	
Totagatic	 Vorm limited	1	 Very limited	1
iotagatie	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
		į		İ
Bowstring	Very limited	İ	Very limited	İ
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
Ausable	 Very limited		 Very limited	
Hababic	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	İ
22A: Comstock	 Very limited		 Very limited	1
Comstock	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Seepage	0.53
	permeability		beepage 	
	į	į		İ
24A:				!
Poskin	Very limited		Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	1
	capacity		 	1
	Seepage	1.00	 	1
	Restricted	0.46	 	1
	permeability	1	I	1

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
27A:				
Scott Lake	Very limited Depth to saturated zone Filtering capacity Seepage Restricted permeability	 1.00 1.00 1.00 0.46	Very limited Seepage Depth to saturated zone	 1.00 1.00
28B: Haugen, very stony	Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	Somewhat limited Depth to saturated zone Seepage Slope	 0.75 0.53 0.32
Haugen	Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	Somewhat limited Depth to saturated zone Seepage Slope	 0.75 0.53 0.32
Rosholt, very stony	 Very limited Filtering capacity Seepage Restricted permeability	 1.00 1.00 0.46	 Very limited Seepage Slope 	 1.00 0.32
Rosholt		 1.00 1.00 0.46	 Very limited Seepage Slope 	 1.00 0.32
28C:			 	
Haugen, very stony	Very limited Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.04	Very limited Slope Depth to saturated zone Seepage	 1.00 0.75 0.53
Haugen	 Very limited Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.04	 Very limited Slope Depth to saturated zone Seepage	 1.00 0.75 0.53
Rosholt, very stony		 1.00 1.00 0.46 0.04	 Very limited Seepage Slope 	 1.00 1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	.ds	Sewage lagoons	
	 Rating class and limiting features	Value	 Rating class and limiting features	Value
	İ	İ	İ	İ
28C:				
Rosholt	Very limited	1	Very limited	
	Filtering capacity	1.00	Seepage Slope	1.00
	Seepage	1.00	Slope	1
	Restricted	0.46		i
	permeability	j	İ	j
	Slope	0.04	!	
33B:	 		l I	
	 Very limited		 Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
33C:	 	1	 	
Chetek	 Very limited	i	 Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope 	0.04	 	
38A:		İ		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	1 00	 -	
	Seepage Restricted	1.00 0.46	 	l
	permeability			
38B: Rosholt	 Very limited		 Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	j	Slope	0.32
	Seepage	1.00		
	Restricted	0.46		
	permeability		 	
38C:		İ		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	1 00	Slope	1.00
	Seepage Restricted	1.00 0.46	 	
	permeability		 	i
	Slope	0.04	İ	İ
38D:			 	
Rosholt	 Very limited	l l	 Very limited	l l
	Filtering	1.00	Slope	1.00
	capacity	j	Seepage	1.00
	Seepage	1.00		
	Slope	1.00		
	Restricted permeability	0.46	 	
42D:				
Amery	Very limited Restricted	1.00	Very limited	1.00
	Restricted permeability	1	Slope Seepage	0.53
	Slope	1.00		İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and	Value	Rating class and limiting features	Value
43B:	 		 	
Antigo	Very limited Filtering capacity Seepage Restricted	 1.00 1.00 0.46	Very limited Seepage Slope	1.00
	permeability			
429				
43C: Antigo	 Very limited Filtering capacity Seepage Restricted permeability Slope	 1.00 1.00 0.46 0.37	 Very limited Seepage Slope 	 1.00 1.00
43D:		į		į
Antigo	Very limited Filtering capacity Slope Seepage Restricted permeability	 1.00 1.00 1.00 0.46	Very limited Slope Seepage 	 1.00 1.00
48A:	 		 	
Brill	Very limited Depth to saturated zone Filtering capacity Seepage Restricted permeability	 1.00 1.00 1.00 0.46	Very limited Seepage Depth to saturated zone 	 1.00 0.99
63A:		į		į
Crystal Lake	Depth to saturated zone Restricted permeability	 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 0.53
63B:				
Crystal Lake	Very limited Depth to saturated zone Restricted permeability	 1.00 1.00 	Very limited Depth to saturated zone Seepage Slope	 1.00 0.53 0.32
63C:		į		į
Crystal Lake	Very limited	 1.00 1.00 0.04	Very limited Slope Depth to saturated zone Seepage	 1.00 0.99 0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	 Sewage lagoons 	
	 Rating class and limiting features	Value	Rating class and limiting features	Value
	IIMICING Teacures	1	IIMICING TEACUTES	1
63E:	! 	i	 	i
Crystal Lake	 Very limited	i	 Very limited	i
	Depth to	1.00	Slope	1.00
	saturated zone		Seepage	0.53
	Slope	1.00	Depth to	0.19
	Restricted permeability	1.00	saturated zone	
64A:	 		 	
Totagatic	Very limited	İ	Very limited	İ
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity Subsidence	1 00	Ponding	1.00
	Seepage	1.00 1.00	Content of organic matter	1.00
	beepage	1	Organic Maccer	1
Winterfield	 Very limited	i	 Very limited	i
	Flooding	1.00	Flooding	1.00
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	!
	capacity			
	Seepage	1.00		
69B:	 	i	 	1
	 Very limited	i	 Very limited	i
	Seepage	1.00	Seepage	1.00
			Slope	0.32
_				
Sayner	Very limited	1 00	Very limited	
	Filtering capacity	1.00	Seepage Slope	1.00
	Seepage	1.00	blobe	0.32
	2002430			i
Vilas	 Very limited	i	 Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
609				-
69C:	 Vorus limited		 Vorus limited	
Keweenaw	Very limited Seepage	1.00	Very limited Seepage	1.00
	Slope	0.16	Slope	1.00
	<u> </u>	i	<u> </u>	i
Sayner	Very limited	j	Very limited	İ
		11 00	Seepage	1.00
	Filtering	1.00	F3-	
	capacity	į	Slope	1.00
	capacity Seepage	1.00		1.00
	capacity	į		1.00
Vilagana	capacity Seepage Slope	1.00	Slope 	1.00
Vilas	capacity Seepage Slope	 1.00 0.16 	Slope	
Vilas	capacity Seepage Slope Very limited Filtering	1.00	Slope Very limited Seepage	 1.00
Vilas	capacity Seepage Slope Very limited Filtering capacity	 1.00 0.16 1.00	Slope	
Vilas	capacity Seepage Slope Very limited Filtering	 1.00 0.16 	Slope Very limited Seepage	 1.00

Table 19a.--Sanitary Facilities--Continued

limiting features	
	alue
Keweenaw	
Keweenaw	
Slope 1.00 Slope 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Slope 1.00 Slope 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Seepage 1.00 Slope 1.00 Slope 1.00 Slope 1.00 Seepage 1.00 S	
Sayner	.00
Filtering	.00
Filtering	
capacity Seepage 1.00 Slope 1.00 Seepage 1.00 Vilas	.00
Seepage	.00
Vilas	
Filtering 1.00 Slope 1	
Filtering 1.00 Slope 1	
Slope 1.00	.00
Seepage	.00
74B:	
Vilas	
Filtering	
capacity Slope 0	
	.00
Seepage 1.00	.08
74C:	
Vilas Very limited Very limited	
	.00
capacity	.00
Slope 0.37	
i i i i	
74D:	
Vilas Very limited Very limited Filtering 1.00 Slope 1.00 Very limited	.00
	.00
Slope 1.00	
Seepage 1.00	
100B:	
MenahgaVery limited Very limited	
	.00
capacity Slope 0	.08
Seepage 1.00	
100C:	
MenahgaVery limited Very limited	
Filtering 1.00 Seepage 1.	.00
	.00
Seepage 1.00	
100D:	
Menahga Very limited Very limited	
3	.00
capacity Seepage 1.00	.00
Slope 1.00	
i i i	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
127D:	l I		 	
	 Very limited		 Very limited	
	Restricted	1.00	Slope	1.00
	permeability		Seepage	0.53
	Slope	1.00	 	
Rosholt	 Very limited	i	 Very limited	
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage Slope	1.00	 	
	Restricted	0.46	 	
	permeability			j
	!	1		
127E: Amery	 Very limited		 Very limited	
Amery	Slope	1.00	Slope	1.00
	Restricted	1.00	Seepage	0.53
	permeability			ļ
Rosholt	 Vorus limited		 Very limited	
KOSHOIC	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00		ĺ
	Seepage	1.00		
	Restricted permeability	0.46	 	
		i		j
156B:				
Magnor, very stony	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Seepage	0.53
	permeability			
Magnor	 Very limited		 Very limited	
Magnor	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability		 	
157B:	 	i	 	l I
Freeon, very stony	 Very limited	i	 Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone	1.00	saturated zone	0.53
	Restricted permeability	1	Seepage Slope	0.33
		i		
Freeon	: -	1	Very limited	
	Depth to	1.00		1.00
	saturated zone Restricted	1.00	saturated zone Seepage	0.53
	permeability		Slope	0.32
				1
157C:	 		 	
Freeon, very stony	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Slope	1.00
	Restricted	11.00	Diope	1-00
	Restricted permeability Slope	0.04	Seepage	0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
1570.				
157C: Freeon	 Very limited Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.04	 Very limited Depth to saturated zone Slope Seepage	 1.00 1.00 0.53
160A:			l	
Oesterle	 Very limited Depth to saturated zone Filtering capacity Seepage	 1.00 1.00 1.00	 Very limited Seepage Depth to saturated zone	 1.00 1.00
182B:				
Padus	Very limited Filtering capacity Seepage Restricted permeability	 1.00 1.00 0.46	Very limited Seepage Slope 	 1.00 0.08
182C:			 	
Padus	Very limited Filtering capacity Seepage Restricted permeability Slope	 1.00 1.00 0.46 0.37	Very limited Seepage Slope 	 1.00 1.00
1023.				
192A: Worcester	Very limited Depth to saturated zone Filtering capacity Seepage Restricted permeability	 1.00 1.00 1.00 0.46	 Very limited Seepage Depth to saturated zone 	 1.00 1.00
193A:			 	
Minocqua	Very limited Depth to saturated zone Filtering capacity Seepage Ponding Restricted permeability	 1.00 1.00 1.00 1.00 0.46	Very limited Seepage Depth to saturated zone Ponding Content of organic matter	 1.00 1.00 1.00 1.00
215B: Pence	 Very limited		 Very limited	
rence	Very limited Filtering capacity Seepage	 1.00 1.00	Very limited Seepage Slope 	 1.00 0.08

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons 	
	Rating class and	Value		Value
	limiting features		limiting features	
0.1.5.				
215C:	 Very limited		 Tom: limited	
Pence	Filtering	1.00	Very limited Seepage	1.00
	capacity	1	Slope	1.00
	Seepage	1.00	22020	
	Slope	0.37	i İ	İ
215D:	[1		
Pence	Very limited		Very limited	
	Filtering	1.00	Slope	1.00
	capacity Slope	1.00	Seepage	1.00
	Seepage	1.00	 	
	beepage		 	
315A:	į	į	İ	i
Rib	Very limited		Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity		Ponding	1.00
	Seepage Ponding	1.00	 	l I
	Restricted	0.46	 	1
	permeability			
225				
337A: Plover	 Very limited		 Very limited	1
PIOVEL	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	į		İ
	ļ.	!	[
368B:				
Mahtomedi	Very limited		Very limited	
	Filtering capacity	1.00	Seepage Slope	1.00
	Seepage	1.00	biope	0.32
				i
Cress	Very limited	į	Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		
368C:			 	
Mahtomedi	 Very limited		 Very limited	1
Mancomear	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope	0.04	[
Cress	 Very limited		 Very limited	
C1699	Very limited Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
		1	1	1
	Slope	0.04		

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and	Value	Rating class and limiting features	Value
368D:			 	
Mahtomedi	Very limited	İ	 Very limited	
	Filtering	1.00	Slope	1.00
	capacity	[Seepage	1.00
	Seepage Slope	1.00 1.00		
Cress	 Very limited		 Very limited	
Cress	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage	1.00		
	Slope	1.00	 	
371A:				
Croswell	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	1
	capacity			
	Seepage	1.00		į
380B:			 	
Cress	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope 	0.32
Rosholt			Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage Restricted	1.00 0.46	 	I
	permeability			
380C:	 			
Cress	Very limited	į	Very limited	į
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage Slope	1.00		
Rosholt	 Very limited		 Very limited	
ROBIIOIC	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00	· -	į
	Restricted	0.46		
	permeability			
	Slope	0.04	[
380D:	į	į		į
Cress	Very limited		Very limited	
	Filtering capacity	1.00	Slope Seepage	1.00
	Seepage	1.00	 	
	Slope	1.00		i
		İ		İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	 Septic tank absorption fiel 	ds	 Sewage lagoons 	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
2005				
380D: Rosholt	 Very limited		 Very limited	
KOBIIOIC	Filtering	1.00	Slope	1.00
	capacity	i	Seepage	1.00
	Seepage	1.00		
	Slope	1.00		
	Restricted permeability	0.46	 	
	permeability	l	 	
383B:		i		i
Mahtomedi	Very limited	İ	Very limited	İ
	Filtering	1.00		1.00
	capacity	1.00	Slope	0.08
	Seepage 	1.00	 	
383C:		i		i
Mahtomedi	Very limited	İ	Very limited	İ
	Filtering	1.00		1.00
	capacity	1.00	Slope	1.00
	Seepage Slope	0.04	 	
				i
383D:	İ	İ	į	İ
Mahtomedi			Very limited	
	Filtering	1.00	Slope	1.00
	capacity Seepage	1.00	Seepage	1.00
	Slope	1.00		i
	İ	İ	İ	İ
396B:	 		 	
Friendship	Very limited Filtering	1.00	Very limited Seepage	1.00
	capacity		Depth to	0.17
	Seepage	1.00	saturated zone	i
	Depth to	0.84		
	saturated zone			
Wurtsmith	 Very limited		 Very limited	
	Depth to	1.00		1.00
	saturated zone	į	Depth to	1.00
	Filtering	1.00	saturated zone	!
	capacity			
	Seepage 	1.00	 	
Grayling	 Very limited	i	 Very limited	i
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00	 	
397A:	 		! 	
Perchlake	 Very limited	i	 Very limited	į
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering capacity	1.00	saturated zone	
	Capacity Seepage	1.00	 	
			į	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	 Sewage lagoons 	ı
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
399B:			 	
Grayling	Very limited	į	Very limited	j
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00	 	
399C:	 		 	
Grayling	Very limited	İ	 Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00		
	Slope	0.04	 -	
399D:			 	
	 Very limited	İ	 Very limited	İ
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Seepage	1.00		
	Slope	1.00	 -	
405A:			 	
Lupton	 Very limited	İ	 Very limited	İ
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Subsidence	1.00	Depth to	1.00
	Seepage	1.00	saturated zone	
	Ponding	1.00	Seepage Ponding	1.00
			Ionaing	
Cathro	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Seepage	1.00
	Restricted permeability	0.72	Ponding Content of	1.00
	permeability		organic matter	1
		į		j
Tawas	Very limited	[Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone	1.00	Depth to	1.00
	Filtering capacity	1.00	saturated zone	1.00
	Subsidence	1.00		1.00
	Seepage	1.00	:	
	Ponding	1.00	İ	İ
		ļ		
406A:	 		 	
Loxley	Very limited Depth to	1.00	Very limited Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Seepage	1.00
	capacity	İ	Depth to	1.00
	Subsidence	1.00	saturated zone	į
	Seepage Ponding	1.00	Ponding	1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	.ds	 Sewage lagoons 	3
	Rating class and limiting features	Value	Rating class and limiting features	Value
407A: Seelyeville	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00		 1.00 1.00 1.00
Markey	Very limited Depth to saturated zone Filtering capacity Seepage Ponding Restricted permeability	 1.00 1.00 1.00 1.00 0.46		 1.00 1.00 1.00 1.00
410A: Seelyeville	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Content of organic matter Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00
Cathro	 Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.72 	Very limited Depth to saturated zone Seepage Ponding Content of organic matter	 1.00 1.00 1.00
412A: Rifle	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Content of organic matter Seepage Depth to saturated zone Ponding	 1.00 1.00 1.00
Tacoosh	 Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.46	Very limited Depth to saturated zone Seepage Ponding Content of organic matter	 1.00 1.00 1.00
415A: Greenwood	 Very limited Depth to saturated zone Subsidence Seepage Ponding	 1.00 1.00 1.00 1.00	organic matter Depth to saturated zone	 1.00 1.00 1.00 1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
439B: Graycalm	 Very limited Filtering capacity Seepage	 1.00 1.00	 Very limited Seepage Slope	 1.00 0.08
Menahga	 Very limited Filtering capacity Seepage	 1.00 1.00	 Very limited Seepage Slope 	 1.00 0.08
439C: Graycalm	Filtering capacity Seepage Slope Very limited Filtering capacity Seepage	1.00 1.00 0.04 1.00 1.00	Very limited Seepage Slope	 1.00 1.00 1.00 1.00
439D: Graycalm	Slope 	0.04 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00
Menahga	 Very limited Filtering capacity Seepage Slope	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00
441C: Freeon	Very limited Depth to saturated zone Restricted permeability Slope	 1.00 1.00 0.37	Very limited Depth to saturated zone Slope Seepage	 1.00 1.00 0.53
Cathro	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.72 	Very limited Depth to saturated zone Seepage Ponding Content of organic matter	 1.00 1.00 1.00 1.00
442C: Haugen	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 Very limited Slope Depth to saturated zone Seepage	 1.00 0.75 0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	 Septic tank absorption fiel	.ds	Sewage lagoons	
	Rating class and limiting features	Value	 Rating class and limiting features	Value
	!	[!	Ţ
442C: Greenwood	 Very limited		 Town limited	-
Greenwood	Depth to	1.00	Very limited Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity		saturated zone	
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
443D:	 		 	i
Amery	Very limited	j	Very limited	į
	Slope	1.00	Slope	1.00
	Restricted	1.00	Seepage	0.53
	permeability	l l	 	
Greenwood	 Very limited		 Very limited	1
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity	1 00	saturated zone	
	Seepage Ponding	1.00 1.00	Seepage Ponding	1.00
	Ionaing			
461A:	į	j	İ	į
Bowstring	Very limited		Very limited	1
	Flooding	1.00	Flooding	1.00
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity	i	Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Seepage	1.00	organic matter	
484A:	 	l l	 	
Greenwood	 Very limited		 Very limited	1
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity Seepage	1.00	saturated zone Seepage	1.00
	Ponding	1.00	Ponding	1.00
	İ	j		i
Beseman	Very limited		Very limited	1
	Depth to	1.00	Depth to	1.00
	saturated zone	1.00	saturated zone Seepage	1.00
	permeability	1	Beepage Ponding	1.00
	Subsidence	1.00	Content of	1.00
	Ponding	1.00	organic matter	İ
4055				1
495B: Karlsborg	 Very limited	I	 Very limited	
warrabora	Restricted	1.00	Seepage	1.00
	permeability		Depth to	0.99
	Depth to	1.00	saturated zone	
	saturated zone		Slope	0.32
	Filtering	1.00		
	capacity	1.00	 -	1
	Seepage			

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>		[
495B: Grettum	 Very limited		 Very limited	
	Filtering	1.00	Seepage	1.00
	capacity	İ	Slope	0.32
	Seepage	1.00	Depth to	0.17
	Depth to saturated zone	0.84	saturated zone	
Perida	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability		Slope	0.32
	Depth to saturated zone	1.00	 	l
	Filtering	1.00		
	capacity	į		İ
	Seepage	1.00		
495C:	 		 	
Karlsborg	 Very limited	İ	 Very limited	İ
	Restricted	1.00	Seepage	1.00
	permeability		Slope	1.00
	Depth to	1.00	Depth to saturated zone	0.99
	saturated zone	1.00	saturated zone	l
	capacity		 	
	Seepage	1.00		į
	Slope	0.04	l I	
Grettum	 Very limited		 Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage	1.00	Depth to	0.17
	Depth to	0.84	saturated zone	
	saturated zone Slope	0.04		
				i
Perida	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability Depth to	1.00	Slope	1
	saturated zone			
	Filtering	1.00		j
	capacity			
	Seepage	1.00		
	Slope	0.04		
495D:				
Karlsborg	Very limited		Very limited	
	Restricted	1.00	Slope	1.00
	permeability Depth to	1.00	Seepage Depth to	1.00
	saturated zone		saturated zone	
	Filtering	1.00		i
	capacity			
	Seepage	1.00		
	Slope	1.00	I	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	 Septic tank absorption fiel 	ds	 Sewage lagoons 	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
4055				
495D: Grettum	 Very limited		 Very limited	l I
GIECCUM	Filtering	1.00		1.00
	capacity	i	Seepage	1.00
	Seepage	1.00	Depth to	0.17
	Slope	1.00	saturated zone	
	Depth to	0.84		
	saturated zone		 	
Perida	 Very limited	i	 Very limited	İ
	Restricted	1.00	Slope	1.00
	permeability	İ	Seepage	1.00
	Depth to	1.00		
	saturated zone			
	Filtering	1.00	 	
	capacity Seepage	1.00	 	l
	Slope	1.00	! 	
	j	j	İ	j
497A:	[[
Meenon	Very limited		Very limited	
	Restricted	1.00	Seepage	1.00
	permeability Depth to	1.00	Depth to saturated zone	1.00
	saturated zone			
	Filtering	1.00		i
	capacity			
	Seepage	1.00		
515A:	 		 	
	 Very limited	i	 Very limited	İ
	Depth to	1.00	: -	1.00
	saturated zone	į	Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity			
	Seepage	1.00	 	
521A:	 	İ	 	İ
Dody	 Very limited	i	 Very limited	i
	Restricted	1.00	Seepage	1.00
	permeability		Depth to	1.00
	Depth to	1.00	saturated zone	
	saturated zone	1.00	Ponding Content of	1.00
	Filtering capacity	1	organic matter	1
	Seepage	1.00		i
	Ponding	1.00	İ	j
	!		!	
524E:				
Rock outcrop	Not rated		Not rated	
Frogcreek	 Verv limited		 Very limited	
-9	Depth to	1.00	Depth to	1.00
	saturated zone	j	saturated zone	i
	Restricted	1.00	Slope	1.00
	permeability		Seepage	0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
524E:	į	İ		İ
Metonga	Very limited		Very limited	
	Depth to bedrock Slope	1.00	Depth to hard bedrock	1.00
	Restricted	0.46	Slope	1.00
	permeability	į	Seepage	1.00
542B:	 		l	
Haugen, very stony	 Very limited		 Somewhat limited	
	Depth to	1.00	Depth to	0.75
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability		Slope	0.32
Haugen	 Very limited		 Somewhat limited	
	Depth to	1.00	Depth to	0.75
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	1	Slope	0.32
542C:				
Haugen, very stony	Very limited		Very limited	
	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.75
	Restricted permeability	1.00	saturated zone	0.53
	Slope	0.04	Seepage 	
	į	į		į
Haugen	Very limited		Very limited	
	Depth to saturated zone	1.00	Slope Depth to	1.00
	Restricted	1.00	saturated zone	0.75
	permeability		Seepage	0.53
	Slope	0.04		į
543B:	 		l	
Anigon	 Very limited		 Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.32
	Seepage	1.00		ļ
	Restricted permeability	0.46	İ	
	bermeapility		 	
543C2:	İ	į	İ	j
Anigon	Very limited		Very limited	
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope	1.00
	Restricted	0.46	 	l
	permeability			i
	Slope	0.04		į
544F:	 		 	
Menahga	 Very limited		 Very limited	
-	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00		
	Seepage	1.00		

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
544F: Mahtomedi	Very limited Filtering capacity Slope Seepage	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00
555A: Fordum	Very limited Flooding Depth to saturated zone Filtering capacity Seepage Ponding	 1.00 1.00 1.00 1.00	 Very limited Flooding Seepage Depth to saturated zone Ponding	 1.00 1.00 1.00 1.00
574B: Sayner	 Very limited Filtering capacity Seepage	 1.00 1.00	 Very limited Seepage Slope	 1.00 0.08
574C: Sayner	 Very limited Filtering capacity Seepage Slope	 1.00 1.00 0.37	 Very limited Seepage Slope 	 1.00 1.00
574E: Sayner	 Very limited Filtering capacity Slope Seepage	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00
579B: Parkfalls	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 0.53
600A: Haplosaprists Psammaquents		 	 Not rated Not rated	
615B: Cress		 1.00 1.00	 	 1.00 0.08
615C: Cress	 Very limited Filtering capacity Seepage Slope	 1.00 1.00 0.04	 Very limited Seepage Slope 	 1.00 1.00

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fields		Sewage lagoons	
	Rating class and limiting features	Value	Rating class and limiting features	Value
615D:				
	 Very limited	1	 Very limited	1
02000	Filtering	1.00		1.00
	capacity	į	Seepage	1.00
	Seepage	1.00		
	Slope	1.00	 -	
623A:	 	 	 	
Capitola	 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	ĺ	saturated zone	ĺ
	Ponding	1.00	Ponding	1.00
		ļ	Content of	1.00
			organic matter	
	 		Seepage	0.53
624A:	 	i	 	i
	 Very limited	İ	 Very limited	İ
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity			ļ
	Seepage Restricted	1.00	 	
	permeability	0.46	 	l I
	permeability		 	
632A:	j	į	İ	į
Aftad	Very limited		Very limited	
	Depth to	1.00		1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage	0.53
	permeability	İ		i
632B:		į		į
Aftad	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Seepage	0.53
	permeability	1	Slope 	0.32
632C:		İ		İ
Aftad	Very limited	į	Very limited	į
	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.99
	Restricted	1.00	!	
	permeability	0.04	Seepage	0.53
	Slope 		 	
633F:				
Pence	Very limited		Very limited	
	Filtering	1.00	Slope	1.00
	capacity		Seepage	1.00
	Slope	1.00	 	
	Seepage 	1.00	 	
	I	1	I	1

Table 19a.--Sanitary Facilities--Continued

absorption fiel	ds	Sewage lagoons	
Rating class and limiting features	Value	Rating class and limiting features	Value
Very limited Filtering capacity	1.00	 Very limited Slope Seepage	 1.00 1.00
Slope Seepage Restricted permeability	1.00 1.00 0.46	 - - 	
	İ		
Very limited Depth to saturated zone Seepage Restricted permeability		_	 1.00 0.99 0.32
	i		
Very limited Seepage Slope	1	-	 1.00 1.00
Very limited Filtering capacity Seepage Slope	 1.00 1.00 0.37	 Very limited Seepage Slope 	 1.00 1.00
Very limited Slope Seepage	1.00	Slope	 1.00 1.00
	į		
Filtering capacity	1.00	Slope Seepage	1.00
Slope Seepage	1.00		
Very limited Depth to	1.00	· -	1.00
saturated zone Restricted permeability	1.00	Depth to saturated zone	0.75
Very limited		 Verv limited	
Depth to	1.00	Seepage	1.00
Restricted permeability	1.00	Depth to saturated zone Slope	0.75 0.32
Very limited Depth to	1.00	Somewhat limited Depth to	0.75
saturated zone Filtering	1.00	saturated zone Seepage	0.53
capacity Restricted	1.00	Slope	0.32
	Rating class and limiting features Very limited Filtering capacity Slope Seepage Restricted permeability Very limited Depth to saturated zone Seepage Restricted permeability Very limited Seepage Slope Very limited Filtering capacity Seepage Slope Very limited Slope Seepage Very limited Filtering capacity Slope Seepage Very limited Filtering capacity Slope Seepage Very limited Filtering capacity Slope Seepage Very limited Depth to saturated zone Restricted permeability Very limited Depth to saturated zone Restricted permeability Very limited Depth to saturated zone Restricted permeability Very limited Depth to saturated zone Restricted permeability Very limited Depth to saturated zone Restricted permeability	Rating class and limiting features Very limited Filtering 1.00 capacity Slope 1.00 Restricted permeability Very limited Depth to saturated zone Seepage 1.00 Restricted 0.46 permeability Very limited Seepage 1.00 Restricted 0.46 permeability Very limited Seepage 1.00 Saturated zone Seepage 1.00 Saturated zone Seepage 1.00 Saturated zone Slope 0.37 Very limited Slope 1.00 Seepage 1.00 Seepage 1.00 Very limited Filtering 1.00 Capacity Slope 1.00 Seepage 1.00 Very limited Filtering 1.00 Capacity Slope 1.00 Seepage 1.00 Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Restricted 1.00 Permeability Very limited Depth to saturated zone Filtering 1.00 Capacity Restricted 1.00 Capacity Restricted 1.00 Capacity Restricted 1.00 Capacity	Rating class and limiting features Value Rating class and limiting features Very limited Very limited Seepage Seep

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	 Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
680B: Pence, stony	 Very limited Filtering capacity Seepage	 1.00 1.00	 Very limited Seepage Slope	 1.00 0.32
683A: Tipler	Very limited Depth to saturated zone Filtering capacity Seepage Restricted permeability	 1.00 1.00 1.00 0.46	 Very limited Seepage Depth to saturated zone	 1.00 1.00
706A: Winterfield	 Very limited Flooding Depth to saturated zone Filtering capacity Seepage	 1.00 1.00 1.00 	 Very limited Flooding Seepage Depth to saturated zone	 1.00 1.00 1.00
Totagatic	 Very limited Flooding Depth to saturated zone Filtering capacity Seepage Ponding	 1.00 1.00 1.00 1.00	 Very limited Flooding Seepage Depth to saturated zone Ponding	 1.00 1.00 1.00 1.00
724A: Rib	Very limited Depth to saturated zone Filtering capacity Seepage Ponding Restricted permeability	 1.00 1.00 1.00 1.00 0.46	 Very limited Seepage Depth to saturated zone Ponding	 1.00 1.00 1.00
Rock outcrop 726B: Sissabagama	 	 1.00 1.00	Not rated	 1.00 0.08

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	 Septic tank absorption fiel	ds	 Sewage lagoons 	
	 Rating class and limiting features	Value	 Rating class and limiting features	Value
	[!	[ļ
733A:	 		 	
Wozny	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.46	Content of	1.00
	permeability 		organic matter	 0.53
771A:	 		 	
	 Very limited		 Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	ļ
	capacity Seepage	 1.00	 	
827A:	 	 	 	
	 Very limited	i	 Very limited	i
	Depth to	1.00	Seepage	1.00
	saturated zone		Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity Seepage	1.00	 	
	Restricted	0.46	 	i
	permeability	į		į
	!	ļ	!	ļ
853C:	 		 	
Frogcreek	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Slope	1.00
	permeability		Seepage 	0.53
Stinnett	 Very limited	į	 Very limited	į
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage 	0.53
Wozny	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.46	Content of	1.00
	permeability	l I	organic matter Seepage	0.53
	 		beepage 	
856B:	[[
Stinnett			Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted	1.00	Seepage	0.53
	permeability			
857B:	 	 	 	
Frogcreek	 Very limited	İ	 Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Seepage Slope	0.53
	bermeaniirth		 probe	
	'		'	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	.ds	Sewage lagoons		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
857C: Frogcreek	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 Very limited Depth to saturated zone Slope Seepage	 1.00 1.00 0.53	
	Slope	0.16			
873B: Stanberry	 Very limited Depth to saturated zone Filtering capacity Restricted	 1.00 1.00 	Somewhat limited Depth to saturated zone Seepage Slope	 0.75 0.53 0.32	
873C: Stanberry	permeability Very limited Depth to saturated zone Filtering capacity Restricted permeability Slope	 1.00 1.00 1.00	 Very limited Slope Depth to saturated zone Seepage	 1.00 0.75 0.53	
873D: Stanberry	 Very limited Depth to saturated zone Filtering capacity Slope Restricted permeability	 1.00 1.00 1.00	 Very limited Slope Depth to saturated zone Seepage	 1.00 0.75 0.53	
905A: Cublake	Very limited Depth to saturated zone Filtering capacity Restricted permeability	 1.00 1.00 0.72	 Very limited Seepage Depth to saturated zone	 1.00 1.00 	
926A: Flink	Very limited Depth to saturated zone Filtering capacity Restricted permeability	 1.00 1.00 0.72	 Very limited Seepage Depth to saturated zone	 1.00 1.00 	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	 Sewage lagoons 	1
	Rating class and limiting features	Value	Rating class and limiting features	Value
943D: Stanberry	 Very limited		 Very limited	
beamberry	Depth to	1.00	Slope	1.00
	saturated zone	j	Depth to	0.75
	Filtering	1.00	saturated zone	
	capacity Restricted	1.00	Seepage	0.53
	permeability	1	 	1
	Slope	1.00		
Greenwood	 Very limited		 Very limited	
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Ponding Restricted	1.00	Depth to saturated zone	1.00
	permeability		Ponding	1.00
			Seepage	0.53
948A:				
Billyboy	Very limited		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00
	Filtering	1.00	saturated zone	
	capacity	j		j
	Seepage	1.00		
	Restricted permeability	0.46		
970C:				
Keweenaw	 Very limited	i	 Very limited	
	Seepage	1.00	Seepage	1.00
	Slope	0.37	Slope 	1.00
Pence	 Very limited		 Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity Seepage	1.00	Slope	1.00
	Slope	0.37		
Greenwood	 Very limited		 Very limited	
	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering capacity	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
970E:			 	
Keweenaw	-		Very limited	
	Slope	1.00	Slope	1.00
	Seepage 	1.00	Seepage 	1.00
Pence	Very limited		Very limited	į
	Filtering	1.00	Slope	1.00
	capacity Slope	1.00	Seepage	1.00
	Seepage	1.00	 	
	İ	İ	İ	İ

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
970E: Greenwood	 Very limited		 Very limited	
GI eeiiwood	Depth to	1.00	Content of	1.00
	saturated zone		organic matter	
	Filtering	1.00	Depth to	1.00
	capacity		saturated zone	
	Seepage	1.00	Seepage	1.00
	Ponding	1.00	Ponding	1.00
1070C:]	
	 Very limited		 Very limited	l
I I CAMB CACC	Seepage	1.00	Seepage	1.00
	Slope	0.16	Slope	1.00
	j	İ		j
Cress	Very limited	İ	Very limited	
	Filtering	1.00	Seepage	1.00
	capacity		Slope	1.00
	Seepage Slope	1.00]	
	blope			
1070D:		İ		
Fremstadt	Very limited	į	Very limited	İ
	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00
G	 			
Cress	Very limited Filtering	1.00	Very limited Slope	1.00
	capacity	1	Siope Seepage	1.00
	Seepage	1.00		
	Slope	1.00		j
1080B:				
Spoonerhill	· -		Very limited	
	Depth to saturated zone	1.00	Seepage Depth to	1.00 0.75
	Restricted	1.00	saturated zone	
	permeability		Slope	0.32
		İ		İ
Spoonerhill, stony	-	[Very limited	
	Depth to	1.00	Seepage	1.00
	saturated zone	1.00	Depth to saturated zone	0.75
	permeability	1	Slope	0.32
	permeability			
Cress	 Very limited	į	 Very limited	İ
	Filtering	1.00	Seepage	1.00
	capacity		Slope	0.08
	Seepage	1.00		
1653C:	 	 	 	
Stanberry	 Very limited		 Very limited	
<u>.</u>	Depth to	1.00	Slope	1.00
	saturated zone		Depth to	0.75
	Filtering	1.00	saturated zone	
	capacity		Seepage	0.53
	Restricted	1.00	l	
	permeability Slope	0.04	 	I
	PTOPE	0.01	I	1

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	 Septic tank absorption fiel 	ds	 Sewage lagoons 	1
	Rating class and limiting features	Value	Rating class and limiting features	Value
1653C: Parkfalls	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 0.53
Wozny	Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.46	Very limited Depth to saturated zone Ponding Content of organic matter Seepage	 1.00 1.00 1.00 0.53
2015:	_		_	į
Pits	Not rated 		Not rated 	
2050: Landfill	 Not rated 	 	 Not rated 	
3011A: Barronett	Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.53
3125A: Meehan	 Very limited Depth to saturated zone Filtering capacity Seepage	 1.00 1.00 1.00	 Very limited Seepage Depth to saturated zone	 1.00 1.00
3126A: Wurtsmith	 Very limited Depth to saturated zone Filtering capacity Seepage	 1.00 1.00 1.00	 Very limited Seepage Depth to saturated zone	 1.00 1.00
3276A: Au Gres	 Very limited Depth to saturated zone Filtering capacity Seepage	 1.00 1.00 1.00	Depth to	 1.00 1.00
3312B: Glendenning, very stony	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 - Very limited Depth to saturated zone Seepage	 1.00 0.53

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
	ĺ	İ	ĺ	İ	
3312B:	 		 		
Glendenning	very limited Depth to	1.00	Very limited Depth to	1.00	
	saturated zone		saturated zone		
	Restricted	1.00	Seepage	0.53	
	permeability	į		į	
3336A:	 		 		
Fenander	 Very limited		 Very limited	i	
	Depth to	1.00	Depth to	1.00	
	saturated zone	į	saturated zone	į	
	Restricted	1.00	Ponding	1.00	
	permeability		Seepage	0.53	
	Ponding	1.00	l		
3403A:	 		 		
Loxley	Very limited	İ	Very limited	İ	
	Depth to	1.00	Content of	1.00	
	saturated zone		organic matter		
	Filtering	1.00	Seepage	1.00	
	capacity		Depth to	1.00	
	Subsidence	1.00	saturated zone	1.00	
	Seepage Ponding	1.00	Ponding 		
		į		į	
Beseman	Very limited	:	Very limited		
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	
	Restricted	1.00	Seepage	1.00	
	permeability		Ponding	1.00	
	Subsidence	1.00	Content of	1.00	
	Ponding	1.00	organic matter	į	
Dawson	 Very limited		 Very limited		
245011	Depth to	1.00	Seepage	1.00	
	saturated zone		Depth to	1.00	
	Filtering	1.00	saturated zone	j	
	capacity		Ponding	1.00	
	Subsidence	1.00	Content of	1.00	
	Seepage	1.00	organic matter		
	Ponding 	1.00	 		
3424C:		İ		İ	
Frogcreek		1	Very limited		
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone		
	Restricted permeability	1.00	Slope Seepage	1.00	
	permeability		Scopage		
Magroc	Very limited	İ	 Very limited	İ	
	Depth to	1.00	Depth to	1.00	
	saturated zone	[saturated zone		
	Depth to bedrock	0.78	Seepage	1.00	
	Restricted permeability	0.50	Depth to hard bedrock	0.42	

Table 19a.--Sanitary Facilities--Continued

Map symbol and soil name	Septic tank absorption fiel	ds	Sewage lagoons 		
	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	
3424C:	 		 		
Stinnett	 Very limited	i	 Very limited	i	
	Depth to	1.00	Depth to	1.00	
	saturated zone		saturated zone	1	
	Restricted	1.00	Seepage	0.53	
	permeability		 		
Rock outcrop.					
3446A:	 	1	 		
Newson	 Very limited		 Very limited	i	
	Depth to	1.00	_	1.00	
	saturated zone	į	Depth to	1.00	
	Filtering	1.00	saturated zone		
	capacity	1	Ponding	1.00	
	Seepage	1.00	Content of	1.00	
	Ponding	1.00	organic matter		
3448B:					
	 Very limited		 Very limited		
02000	Filtering	1.00	Seepage	1.00	
	capacity		Depth to	0.17	
	Seepage	1.00	saturated zone	į	
	Depth to	0.84	Slope	0.08	
	saturated zone	!		!	
3448C:	 		 		
	 Very limited		 Very limited		
GI et tum	Filtering	1.00	Seepage	1.00	
	capacity		Slope	1.00	
	Seepage	1.00	Depth to	0.17	
	Depth to	0.84	saturated zone	į	
	saturated zone				
	Slope	0.04		!	
25163					
3516A: Slimlake	 Very limited		 Very limited		
DIIMIARE	Depth to	1.00	Seepage	1.00	
	saturated zone		Depth to	1.00	
	Filtering	1.00	saturated zone	İ	
	capacity	İ		İ	
	Seepage	1.00			
2522					
3629B:	 Town limited		 Tom: limited		
Perida	Restricted	1.00	Very limited Seepage	1.00	
	permeability		beepage		
	Depth to	1.00		i	
	saturated zone	i		i	
	Filtering	1.00		İ	
	capacity				
	Seepage	1.00			
M-W:	[[
4/4 - 44 ÷	 Not moted		 Not rated	1	
Miscellaneous water					
Miscellaneous water	Not rated	i		i	
Miscellaneous water	 	 		į į	

Table 19b.--Sanitary Facilities

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Trench sanitar	Y	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3A:						
Totagatic	· -	1 00	Very limited	:	Very limited	11 00
	Flooding Depth to	1.00	Flooding	1.00	· -	1.00
	saturated zone	11.00	Depth to saturated zone	1.00		1.00
	Seepage	1.00	Seepage	1.00	Too sandy Seepage	1.00
	Too sandy	1.00	Ponding	1.00		1.00
	Ponding	1.00	Foliating		Foliating	
Bowstring	 Very limited		 Very limited		 Very limited	
	Flooding	1.00	Flooding	1.00	Depth to	1.00
	Depth to	1.00	Depth to	1.00	saturated zone	
	saturated zone		saturated zone		Content of	1.00
	Content of	1.00	Seepage	1.00	organic matter	
	organic matter		Ponding	1.00	_	1.00
	Seepage	1.00			Seepage	0.16
	Ponding	1.00	 			
Ausable	Very limited	i	Very limited	i	Very limited	i
	Flooding	1.00	Flooding	1.00	Depth to	1.00
	Depth to	1.00	Depth to	1.00	saturated zone	
	saturated zone		saturated zone		Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Ponding	1.00	Ponding	1.00
	Ponding	1.00	l			
22A:						
Comstock	· -	1	Very limited	:	Very limited	
	Depth to	1.00	Depth to	1.00	-	1.00
	saturated zone		saturated zone		saturated zone	
24A:				į		
Poskin	· -	1	Very limited	:	Very limited	
	Depth to	1.00	-	1.00	-	1.00
	saturated zone	11 00	saturated zone	1 00	saturated zone	11 00
	Seepage Too sandy	1.00 1.00	Seepage 	1.00 	Too sandy Seepage	1.00 1.00
27A:			 			
Scott Lake	Very limited	i	 Very limited	i	 Very limited	i
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone	i	saturated zone	i	Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00			saturated zone	
	 		 	 	Gravel content	0.09
28B:						
Haugen, very stony	_		Somewhat limited	:	Somewhat limited	
	Depth to	0.99	Depth to	0.75	Depth to	0.86
	saturated zone		saturated zone		saturated zone	
	1	1		1	Gravel content	0.01

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and limiting features	Value
	limiting features	1	IIMICING TEACUTES	<u> </u>	IIMICING TEACUTES	
28B:		İ		İ		i
Haugen	Very limited		Somewhat limited		Somewhat limited	
	Depth to	0.99	Depth to	0.75	Depth to	0.86
	saturated zone	1	saturated zone		saturated zone	1
				ļ	Gravel content	0.01
Rosholt, very stony	 Town limited		 Warr limited		 Very limited	
ROSHOIC, Very Scony	Seepage	1.00	Very limited Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	beepage	1	Seepage	1.00
				i	Gravel content	0.06
	İ	į		į		į
Rosholt	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.02
28C:	 		 	l i	 	1
Haugen, very stony	 Verv limited		 Somewhat limited	i	 Somewhat limited	ì
	Depth to	0.99		0.75		0.86
	saturated zone	İ	saturated zone	İ	saturated zone	i
	Slope	0.04	Slope	0.04	Slope	0.04
					Gravel content	0.01
		!		ļ		ļ
Haugen		!	Somewhat limited		Somewhat limited	
	Depth to saturated zone	0.99	Depth to saturated zone	0.75	Depth to saturated zone	0.86
	Slope	0.04	Slope	0.04	Slope	0.04
	Siope		Siope		Gravel content	0.01
		İ		İ		
Rosholt, very stony	Very limited	į	Very limited	į	Very limited	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04		ļ	Gravel content	0.06
	 		l I		Slope	0.04
Rosholt	 Very limited		 Very limited		 Very limited	1
Nobiloze	Seepage	1.00	Seepage	1.00	: -	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04	· -	į	Slope	0.04
					Gravel content	0.02
		!		ļ		ļ
33B:						
Chetek	Seepage	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
	Too sandy	1.00	Beepage	1	Seepage	1.00
				i	Gravel content	0.11
	İ	į		į		į
33C:						
Chetek	: -		Very limited	1	Very limited	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04		1.00
	Slope 	0.04	 	I I	Gravel content Slope	0.11
	 		 		 proĥe	0.04
38A:		i		i		i
Rosholt	Very limited	İ	 Very limited	į	Very limited	İ
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
					Gravel content	0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		 Daily cover for landfill		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
38B: Rosholt	 Very limited Seepage Too sandy	 1.00 1.00	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.02	
38C: Rosholt	 Very limited Seepage Too sandy Slope	 1.00 1.00 0.04	 Very limited Seepage Slope 	 1.00 0.04 		 1.00 1.00 0.04 0.02	
38D: Rosholt	 Very limited Seepage Too sandy Slope 	 1.00 1.00 1.00	 Very limited Seepage Slope 	 1.00 1.00 		 1.00 1.00 1.00 0.02	
42D: Amery	 Very limited Slope 	 1.00 	 Very limited Slope 	 1.00 	 Very limited Slope Gravel content	 1.00 0.02	
43B: Antigo	 Very limited Seepage Too sandy	 1.00 1.00	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage	 1.00 1.00	
43C: Antigo	 Very limited Seepage Too sandy Slope	 1.00 1.00 0.37	 Very limited Seepage Slope	 1.00 0.37 	-	 1.00 1.00 0.37	
43D: Antigo	 Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00		 1.00 1.00 1.00	
48A: Brill	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Seepage Depth to saturated zone	 1.00 0.99 	 Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.99	
63A: Crystal Lake	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	 0.86 	
63B: Crystal Lake	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Somewhat limited Depth to saturated zone	 0.86 	

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Trench sanitary landfill			Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
63C:	l I		 	 	 	
Crystal Lake	Depth to	1.00		1.00		0.86
	saturated zone Slope	0.04	saturated zone	0.04	saturated zone	0.04
63E: Crystal Lake	 Very limited		 Very limited		 Very limited	l I
01/2001 1000	Depth to	1.00	: - -	1.00		1.00
	saturated zone	į	Depth to	1.00	Depth to	0.47
	Slope	1.00	saturated zone		saturated zone	
64A:			 		 	
Totagatic	: - T	1	Very limited	1	Very limited	İ
	Flooding	1.00		1.00		1.00
	Depth to	1.00		1.00	!	
	saturated zone Seepage	1.00	saturated zone Seepage	1.00	Too sandy Seepage	1.00
	Too sandy	1.00		1.00		1.00
	Ponding	1.00				
Winterfield	 Verv limited		 Very limited		 Very limited	
	Flooding	1.00	: - -	1.00	: -	1.00
	Depth to	1.00		1.00		i
	saturated zone	İ	saturated zone	ĺ	Too sandy	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	 		 	
69B:	İ					
Keweenaw	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Seepage	1.00		0.50
	Too sandy	0.50	 		Seepage 	0.22
Sayner	Very limited	i	 Very limited	i	 Very limited	İ
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	 		 		Gravel content	0.07
Vilas	Very limited		 Very limited		 Very limited	İ
	Seepage	1.00	Seepage	1.00	!	1.00
	Too sandy	1.00	 		Seepage	1.00
69C:						
Keweenaw	Very limited		Very limited		Somewhat limited	
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	Slope	0.16		0.22
	Slope	0.16	 		Slope 	0.16
Sayner	Very limited	į	Very limited	į	Very limited	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.16	Seepage	1.00
	Slope	0.16	 		Slope Gravel content	0.16 0.03

Vilas	: -	1 00	Very limited	1 00	Very limited	1 00
	Seepage Too sandy	1.00 1.00	Seepage Slope	1.00	Too sandy Seepage	1.00
	Slope	0.16			Slope	0.16
	i	i	İ	İ	į -	İ

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill	•	Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features		Rating class and limiting features	Value
	IIMICING Teacures	1	IIMICING Teacures	1	IIMICING Teacures	1
69E:				İ		İ
Keweenaw	Very limited	İ	Very limited	İ	Very limited	ĺ
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50			Seepage	0.22
_						
Sayner	· -		Very limited	1.00	Very limited	1.00
	Slope Seepage	1.00	Slope Seepage	1.00		1.00
	Too sandy	1.00	beepage	1	Seepage	1.00
	100 banay		! 		Gravel content	0.03
		İ		İ		
Vilas	Very limited	j	Very limited	į	Very limited	j
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
74B:						
Vilas	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
	Too sandy	1.00	seepage	1.00	Seepage	1.00
	100 Sandy			İ	beepage	1
74C:					 	
Vilas	Very limited	i	Very limited	i	 Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37			Slope	0.37
74D:	 		 		 	
Vilas	Slope	1.00	Very limited Slope	1.00	Very limited	1.00
	Seepage	1.00	Seepage	1.00	Slope Too sandy	1.00
	Too sandy	1.00	beepage		Seepage	1.00
				İ		
100B:	İ	İ	İ	į	İ	j
Menahga	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
100C: Menahga	 Town limited		 Very limited		 Very limited	
menanga	Seepage	1.00	Seepage	1.00		1.00
	Too sandy	1.00	Slope	0.04		1.00
	Slope	0.04			Slope	0.04
				İ		
100D:				İ	İ	
Menahga	Very limited		Very limited		Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00		1.00
	Slope	1.00			Slope	1.00
1270.	 	1] 	1	 	
127D: Amery	 Very limited	1	 Very limited	1	 Very limited	I I
TWET A	Slope	1.00	Slope	1.00	Slope	1.00
					Gravel content	0.02
	İ	İ	İ	i		ĺ
Rosholt	Very limited		 Very limited		 Very limited	Ì
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	1	1	i .	1	Gravel content	0.06

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
127E:	 Very limited	 	 Very limited	 	 Very limited	
,	Slope	1.00	: -	1.00	: -	1.00
Rosholt	· -	1	 Very limited	1	 Very limited	
	Slope	1.00	:	1.00	<u>-</u>	1.00
	Seepage	1.00	Seepage	1.00	:	1.00
	Too sandy	1.00	 		Seepage Gravel content	0.06
156B:						
Magnor, very stony	-	1	Very limited	1	Very limited	
		1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
Magnor	· -	1	Very limited	1	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
157B:						
Freeon, very stony	-		Very limited	1	Very limited	
	Depth to	1.00		1.00		1.00
	saturated zone		saturated zone		saturated zone	
Freeon	· -	1	Very limited	1	Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
157C:			 		 	
Freeon, very stony	· -	1	Very limited	1	Very limited	
	Depth to	1.00	Depth to	1.00		1.00
	saturated zone		saturated zone		saturated zone	
	Slope 	0.04 	Slope 	0.04	Slope 	0.04
Freeon	· -	1	Very limited	1	Very limited	
	Depth to	1.00		1.00	· -	1.00
	saturated zone	0.04	saturated zone	0.04	saturated zone	0.04
160A:			 		 	
Oesterle	Very limited		Very limited		Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	 		Seepage Gravel content	1.00
182B:	 		 		 	
Padus	Very limited		Very limited	[Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00 	 		Seepage	1.00
182C: Padus	 Very limited		 Very limited		 Very limited	
	Seepage	1.00	Seepage	1.00		1.00
		11 00	01	0.37		11 00
	Too sandy	1.00	Slope	0.37	Seepage	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
192A: Worcester	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 	 Very limited Depth to saturated zone Seepage 	 1.00 1.00	 Very limited Depth to saturated zone Too sandy Seepage Gravel content	 1.00 1.00 1.00 0.04
193A: Minocqua	 Very limited Depth to saturated zone Seepage Too sandy Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage Ponding Gravel content	 1.00 1.00 1.00 1.00
215B: Pence	 Very limited Seepage Too sandy 	 1.00 1.00	 Very limited Seepage 	1.00	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.16
215C: Pence	 Very limited Seepage Too sandy Slope	 1.00 1.00 0.37	 Very limited Seepage Slope 	1.00	 Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 0.37 0.16
215D: Pence	 Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	 Very limited Slope Seepage	 1.00 1.00	 Very limited Slope Too sandy Seepage Gravel content	 1.00 1.00 1.00 0.16
315A: Rib	 Very limited Depth to saturated zone Seepage Too sandy Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00
337A: Plover	 Very limited Depth to saturated zone Too sandy	 1.00 1.00	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone Too sandy	 1.00 1.00
368B: Mahtomedi	 Very limited Seepage Too sandy	 1.00 1.00	 Very limited Seepage 	1.00	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.01
Cress	 Very limited Seepage Too sandy 	 1.00 1.00 	 Very limited Seepage 	1.00	 Too sandy Seepage Gravel content	 1.00 1.00 0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>	
368C:	 		 		 		
Mahtomedi	 Very limited	i	 Very limited	i	 Very limited	i	
	Seepage	1.00	: -	1.00	Too sandy	1.00	
	Too sandy	1.00	Slope	0.04	Seepage	1.00	
	Slope	0.04			Slope	0.04	
					Gravel content	0.01	
Cress	 Verv limited		 Very limited		 Very limited		
	Seepage	1.00		1.00		1.00	
	Too sandy	1.00		0.04	:	1.00	
	Slope	0.04	i -	i	Slope	0.04	
	į	İ	İ	İ	Gravel content	0.02	
2.62				ļ		!	
368D: Mahtomedi	 Verv limited		 Very limited		 Very limited		
	Seepage	1.00	: -	1.00		1.00	
	Too sandy	1.00	Slope	1.00	:	1.00	
	Slope	1.00	. <u>.</u>	İ	Slope	1.00	
	j	į	İ	į	Gravel content	0.01	
_							
Cress		!	Very limited	1	Very limited		
	Seepage	1.00		1.00	:	1.00	
	Too sandy Slope	1.00	Slope	1.00	Seepage Slope	1.00	
	Slope	1	 	i	Gravel content	0.02	
	İ	i	İ	į			
371A:		1		ļ			
Croswell	: -		Very limited	1	Very limited		
	Depth to	1.00	: -	1.00	:	1.00	
	saturated zone Seepage	1.00	saturated zone Seepage	1.00	Seepage Depth to	1.00	
	Too sandy	1.00	seepage	1	saturated zone	1	
				i		ì	
380B:		İ					
Cress	Very limited		Very limited		Very limited		
	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	 		Seepage	1.00	
	 		 		Gravel content	0.02	
Rosholt	 Very limited	İ	 Very limited	İ	 Very limited	i	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00	
	Too sandy	1.00			Seepage	1.00	
		1		ļ	Gravel content	0.02	
380C:	 		 		 		
Cress	 Very limited		 Very limited		 Very limited		
	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	Slope	0.04	Seepage	1.00	
	Slope	0.04			Slope	0.04	
					Gravel content	0.02	
Rosholt	 Very limited		 Very limited		 Very limited		
MODITOT C	Seepage	1.00	Seepage	1.00		1.00	
	Too sandy	1.00	Slope	0.04		1.00	
	Slope	0.04			Slope	0.04	
				i	Gravel content	0.02	
	i	i	i	i	i	i	

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
380D: Cress	 Very limited Seepage Too sandy Slope	 1.00 1.00 1.00	 Very limited Seepage Slope 	 1.00 1.00	 Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 1.00 0.02
Rosholt	 Very limited Seepage Too sandy Slope	 1.00 1.00 1.00	 Very limited Seepage Slope 	 1.00 1.00 	 Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 1.00 0.02
383B: Mahtomedi	 Very limited Seepage Too sandy	 1.00 1.00 	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.01
383C: Mahtomedi	 Very limited Seepage Too sandy Slope	 1.00 1.00 0.04	 Very limited Seepage Slope 	 1.00 0.04 	 Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 0.04 0.01
383D: Mahtomedi	 Very limited Seepage Too sandy Slope	 1.00 1.00 1.00	 Very limited Seepage Slope 	 1.00 1.00	 Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 1.00 0.01
396B: Friendship	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00	 Very limited Too sandy Seepage 	 1.00 1.00
Wurtsmith	Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	Very limited Depth to saturated zone Seepage	 1.00 1.00	Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86
Grayling	 Very limited Seepage Too sandy 	 1.00 1.00	 Very limited Seepage 	1.00	 Very limited Too sandy Seepage	 1.00 1.00
397A: Perchlake	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 0.50	 Very limited Depth to saturated zone Seepage	 1.00 1.00 	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 0.50
399B: Grayling	 Very limited Seepage Too sandy	 1.00 1.00	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage	 1.00 1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and	Value	Rating class and	Valu
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
399C:	 	l I	 		 	
	 Very limited		 Very limited	i	 Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04		ļ	Slope	0.04
399D:	 		 	 	 	
Grayling	 Very limited	İ	 Very limited	i	 Very limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
405A:	 	l I	 		 	
Lupton	 Very limited		 Very limited		 Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding	1.00	 		Seepage	0.16
Cathro	 Very limited	İ	 Very limited	İ	 Very limited	i
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Ponding	1.00	Seepage	1.00	Ponding	1.00
			Ponding	1.00	ĺ	
Tawas	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	Ì
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00	 		Ponding	1.00
406A:			 		 	
Loxley	Very limited	j	Very limited	į	Very limited	j
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter Seepage	1.00	Ponding	1.00	organic matter Ponding	1.00
	Ponding	1.00	 	İ	Seepage	0.16
	İ	j	İ	į		į
407A:					 	
Seelyeville	Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to	1.00
	saturated zone	1	saturated zone	1	saturated zone	1
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter	İ	Ponding	1.00		1
	Seepage	1.00	_	į	Ponding	1.00
	Ponding	1.00			Seepage	0.16
Markey	 Very limited		 Very limited	 	 Very limited	1
·	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	ĺ	saturated zone	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00	I	1	Ponding	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410A:			 		 	
Seelyeville	Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00
	Content of organic matter Seepage	1.00	Seepage Ponding	1.00	Content of	 1.00 1.00
	Ponding	1.00			Seepage	0.16
Cathro	 Very limited		 Very limited		 Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	saturated zone	1.00
	Ponding 	1.00	Seepage Ponding	1.00	Ponding 	1.00
412A: Rifle	 Verv limited	 	 Very limited	 	 Very limited	
	Depth to saturated zone	1.00	! -	1.00	<u>-</u>	1.00
	Seepage Content of	1.00	Seepage Ponding	1.00	!	1.00
	organic matter Ponding	1.00			Ponding Seepage	1.00
Tacoosh	 Very limited Depth to	1.00	 Very limited Depth to	1.00	 Very limited Depth to	1.00
	saturated zone	İ	saturated zone	į	saturated zone	İ
	Content of organic matter Ponding	1.00 1.00	Seepage Ponding	1.00	!	1.00 1.00
			 	 	Seepage 	0.21
415A:	177 1444	į	 		 	
Greenwood	Depth to	1.00	Very limited Depth to	1.00	Very limited Depth to saturated zone	1.00
	saturated zone Content of organic matter	1.00	saturated zone Seepage Ponding	1.00	Content of	1.00
	Seepage Ponding	1.00	Ionarng		Ponding Seepage	1.00
439B:			 			
Graycalm	_	1 00	Very limited	1 00	Very limited	1 00
	Seepage Too sandy	1.00	Seepage 	1.00	Too sandy Seepage	1.00
Menahga	 Very limited Seepage	1.00	 Very limited Seepage	1.00	 Very limited Too sandy	1.00
	Too sandy	1.00	Beepage 		Seepage	1.00
439C:		į		į		į
Graycalm	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
	Too sandy	1.00	Slope	0.04	Seepage	1.00
	Slope	0.04	 		Slope	0.04
Menahga	-	1 00	Very limited	1 00	Very limited	1 00
	Seepage Too sandy	1.00	Seepage Slope	1.00	Too sandy Seepage	1.00
	Slope	0.04	;		Slope	0.04

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
						
439D: Graycalm	 Very limited Seepage	 1.00	 Very limited Seepage	 1.00	 Very limited Too sandy	 1.00
	Too sandy	1.00	Slope	1.00	· -	1.00
Menahga	 Very limited Seepage	 1.00	 Very limited Seepage	 1.00	 Very limited Too sandy	1.00
	Too sandy Slope	1.00	Slope 	1.00	Seepage Slope	1.00
441C:						
Freeon	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
	Slope	0.37	Slope	0.37	Slope	0.37
Cathro	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
		 1.00 	saturated zone Seepage Ponding	 1.00 1.00	saturated zone Ponding	1.00
442C:				 		
Haugen	Very limited Depth to saturated zone	0.99	Somewhat limited Depth to saturated zone	 0.75 	Somewhat limited Depth to saturated zone Gravel content	0.86
	 				Graver content	
Greenwood	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	 1.00 	Very limited Depth to saturated zone	1.00
	Content of organic matter	1.00	Seepage Ponding	1.00	organic matter	1.00
	Seepage Ponding 	1.00 1.00 	 	 	Ponding Seepage 	1.00
443D: Amery	 Very limited	į	 Very limited	į	 Very limited	į
AMELY	Slope	1.00	Slope	1.00	Slope Gravel content	1.00
Greenwood	Depth to	1.00	 Very limited Depth to	1.00	 Very limited Depth to	1.00
	saturated zone Content of organic matter	1.00	saturated zone Seepage Ponding	 1.00 1.00	saturated zone Content of organic matter	1.00
	Seepage Ponding	1.00			Ponding Seepage	1.00
461A:	 		 		 	
	 Very limited		 Very limited		 Very limited	
	Flooding Depth to saturated zone	1.00 1.00 	Flooding Depth to saturated zone	1.00 1.00 	Depth to saturated zone Content of	1.00 1.00
	Content of organic matter	1.00	Seepage Ponding	1.00	organic matter	1.00
	Seepage Ponding	1.00			Seepage	0.16

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Y	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		1				<u> </u>
484A: Greenwood 	 Very limited Depth to	1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
	saturated zone Content of organic matter	1.00	saturated zone Seepage Ponding	 1.00 1.00	saturated zone Content of organic matter	1.00
	Seepage Ponding 	1.00 1.00 	 	 	Ponding Seepage 	1.00 0.22
Beseman	Very limited Depth to saturated zone	 1.00 	Very limited Depth to saturated zone	 1.00 	Very limited Depth to saturated zone	 1.00
	Content of organic matter Ponding	1.00 1.00	Seepage Ponding 	1.00 1.00 	Content of organic matter Ponding Seepage	1.00 1.00 0.22
495B:	 		 -		 -	
Karlsborg	Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	Very limited Seepage Depth to saturated zone	 1.00 0.99 	Very limited Too sandy Seepage Too clayey Depth to saturated zone	 1.00 1.00 1.00 0.99
Grettum	Very limited Depth to saturated zone Seepage	 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00	 Very limited Too sandy Seepage	 1.00 1.00
Perida	Too sandy Very limited Seepage Too sandy Depth to saturated zone	1.00 1.00 1.00 0.09	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage 	 1.00 1.00
495C:	 				 	
Karlsborg	Very limited Depth to saturated zone Seepage Too sandy Slope	 1.00 1.00 1.00 0.04	Very limited Seepage Depth to saturated zone Slope	 1.00 0.99 0.04	Very limited Too sandy Seepage Too clayey Depth to saturated zone Slope	 1.00 1.00 1.00 0.99
Grettum	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00	 Very limited Depth to saturated zone Seepage Slope	 1.00 1.00 0.04	 Very limited Too sandy Seepage Slope	 1.00 1.00 0.04
Perida	Slope Very limited Seepage	0.04	 Very limited Seepage	 1.00	 Very limited Too sandy	 1.00
	Too sandy Depth to saturated zone	1.00 0.09	Slope 	0.04	Seepage Slope 	1.00 0.04
	Slope	0.04	[1

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and	Value	Rating class and limiting features	Value
40FD	İ	İ		İ		İ
495D: Karlsborg	 Verv limited		 Very limited		 Very limited	
.	Depth to	1.00	Seepage	1.00	Too sandy	1.00
	saturated zone	į	Slope	1.00	Seepage	1.00
	Seepage	1.00	Depth to	0.99	Too clayey	1.00
	Too sandy	1.00	saturated zone	ļ	Slope	1.00
	Slope 	1.00 	 		Depth to saturated zone	0.99
Grand haven					 	
Grettum	Depth to	1.00	Very limited Depth to	1.00	Very limited Too sandy	1.00
	saturated zone	1	saturated zone	1	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	1.00	Slope	1.00		
	Slope	1.00	 	į		į
Perida	 Very limited		 Very limited		 Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	Depth to	0.09				
	saturated zone					
497A:		į		į		į
Meenon			Very limited	!	Very limited	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
515A:	 		 	 		
Manitowish	Very limited	i	 Very limited	İ	Very limited	i
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00			saturated zone	0.04
	 		 	 	Gravel content	0.04
521A:				İ		
Dody	Very limited		Very limited	:	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	!	1.00	Seepage	1.00		1.00
	Too clayey	1.00	Ponding	1.00	Hard to compact	1.00
	Ponding	1.00		į	Ponding	1.00
524E:			[[
Rock outcrop	Not rated	į	Not rated	į	Not rated	į
Frogcreek	 Very limited		 Very limited		 Very limited	[
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
Metonga	 Very limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	Depth to bedrock	1.00
	Depth to bedrock	1.00	Depth to bedrock	1	Slope	1.00
	1	1	Seepage	1.00		1

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover fo	or
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
542B: Haugen, very stony	 		 Somewhat limited		 Somewhat limited	
naugen, very stony	Depth to saturated zone	0.99	!	0.75	!	0.86
Haugen	Very limited Depth to saturated zone	 0.99 	 Somewhat limited Depth to saturated zone	 0.75 		 0.86 0.01
542C: Haugen, very stony	 Very limited Depth to saturated zone Slope	 0.99 0.04	 Somewhat limited Depth to saturated zone Slope	 0.75 0.04	 Somewhat limited Depth to saturated zone Slope Gravel content	 0.86 0.04 0.01
Haugen	 Very limited Depth to saturated zone Slope	 0.99 0.04	 Somewhat limited Depth to saturated zone Slope	 0.75 0.04	Somewhat limited Depth to saturated zone Slope Gravel content	 0.86 0.04 0.01
543B: Anigon	 Very limited Seepage Too sandy	1.00	 Very limited Seepage 	 1.00	 Very limited Too sandy Seepage	 1.00 1.00
543C2: Anigon	 Very limited Seepage Too sandy Slope	 1.00 1.00 0.04	 Very limited Seepage Slope	 1.00 0.04		 1.00 1.00 0.04
544F: Menahga	 Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	 Very limited Slope Seepage	 1.00 1.00	 Very limited Slope Too sandy Seepage	 1.00 1.00 1.00
Mahtomedi	 Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00 	Very limited Slope Too sandy Seepage Gravel content	 1.00 1.00 1.00 0.01
555A: Fordum	 Very limited Flooding Depth to saturated zone Seepage Too sandy Ponding	 1.00 1.00 1.00 1.00	 Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	 Very limited Depth to saturated zone Too sandy Seepage Ponding	 1.00 1.00 1.00
574B: Sayner	 Very limited Seepage Too sandy 	 1.00 1.00	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.08

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary		Daily cover fo	r
	Rating class and limiting features	Value	Rating class and limiting features		Rating class and limiting features	
574C: Sayner	 Very limited Seepage	 1.00	 Very limited Seepage	 1.00	 Very limited Too sandy	 1.00
	Too sandy Slope	1.00	Slope	0.37		1.00 0.37 0.08
574E:	 		 		 	1
Sayner	Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	Very limited Slope Seepage 	 1.00 1.00 	-	 1.00 1.00 1.00 0.08
579B: Parkfalls	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00	 Very limited Depth to	 1.00
	saturated zone		saturated zone		saturated zone	
600A:	 		 		 	1
Haplosaprists	Not rated 	 	Very limited Ponding Depth to saturated zone	 1.00 1.00	Not rated 	
Psammaquents	 Not rated 	 	 Very limited Ponding Depth to saturated zone	 1.00 1.00	 Not rated 	
615B:	 		 		 	
Cress	Very limited Seepage Too sandy	 1.00 1.00	Very limited Seepage 	1.00	Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.02
615C:	 		 		 	1
Cress	Very limited Seepage Too sandy Slope 	 1.00 1.00 0.04 	Very limited Seepage Slope 	 1.00 0.04 	· -	 1.00 1.00 0.04 0.02
615D:	İ	İ	İ	İ	İ	İ
Cress	Very limited Seepage Too sandy Slope 	 1.00 1.00 1.00	Very limited Seepage Slope 	 1.00 1.00 	Very limited Too sandy Seepage Slope Gravel content	 1.00 1.00 1.00 0.02
623A:						
Capitola	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00	Very limited Depth to saturated zone Ponding	 1.00 1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
624A:	 		 		 	
Ossmer	 Very limited	i	 Very limited	i	 Very limited	i
	Depth to	1.00	! -	1.00	: -	1.00
	saturated zone	į	saturated zone	į	saturated zone	į
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	 		Seepage	1.00
632A:						i
Aftad		:	Very limited	!	Somewhat limited	
	Depth to	1.00	· -	1.00		0.86
	saturated zone		saturated zone		saturated zone	
632B:	<u> </u>	į		į	<u> </u>	į
Aftad		:	Very limited	:	Somewhat limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.86
632C:						
Aftad	 Very limited	l I	 Very limited	l I	 Somewhat limited	1
Arcad	Depth to	1.00		1.00		0.86
	saturated zone		saturated zone		saturated zone	
	Slope	0.04	!	0.04		0.04
633F:					 	
Pence	Very limited	i	 Very limited	i	 Very limited	i
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
			 		Gravel content	0.16
Padus	 Very limited		 Very limited		 Very limited	
	Slope	1.00	Slope	1.00	-	1.00
	Seepage	1.00	Seepage	1.00	•	1.00
	Too sandy	1.00			Seepage 	1.00
648B:	<u> </u>	į		į		į
Sconsin		1.00	Very limited	!	Very limited	0.99
	Depth to saturated zone	1	Seepage Depth to	1.00	Depth to saturated zone	0.33
	Seepage	1.00	saturated zone			
670C:			 		 	
Keweenaw	 Very limited	İ	 Very limited	İ	Somewhat limited	i
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	Slope	0.37	Slope	0.37
	Slope	0.37			Seepage	0.22
Pence	 Very limited		 Very limited		 Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	0.37		1.00
	Slope	0.37	 		Slope Gravel content	0.37
670E: Keweenaw	 Very limited		 Very limited		 Very limited	
TOMOGITAM	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Siope Seepage	1.00	Too sandy	0.50
	Too sandy	0.50			Seepage	0.22
	i -	i	i İ	i	i	i

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	Ϋ́	Area sanitary landfill		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
670E: Pence	 Very limited Slope Seepage Too sandy	 1.00 1.00 1.00	 Very limited Slope Seepage 	 1.00 1.00 	 Very limited Slope Too sandy Seepage Gravel content	 1.00 1.00 1.00 0.16
671B: Spoonerhill, stony	 Very limited Depth to saturated zone Too sandy	0.99	 Somewhat limited Depth to saturated zone	 0.75 	Somewhat limited Depth to saturated zone Too sandy	0.86
Spoonerhill	Very limited Depth to saturated zone Too sandy	0.99	Somewhat limited Depth to saturated zone	 0.75 	Somewhat limited Depth to saturated zone Too sandy	0.86
680B: Stanberry, stony	Very limited Depth to saturated zone Too sandy	 0.99 0.50	 Somewhat limited Depth to saturated zone	 0.75 	Somewhat limited Depth to saturated zone Too sandy	0.86
Pence, stony	 Very limited Seepage Too sandy 	 1.00 1.00	 Very limited Seepage 	 	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.16
683A: Tipler	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00	Seepage	 1.00 1.00 0.47 0.02
706A: Winterfield	 Very limited Flooding Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Flooding Depth to saturated zone Seepage	 1.00 1.00 1.00	Very limited Depth to saturated zone Too sandy Seepage	 1.00 1.00 1.00
Totagatic	 Very limited Flooding Depth to saturated zone Seepage Too sandy Ponding	 1.00 1.00 1.00 1.00	 Very limited Flooding Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00 1.00	saturated zone Too sandy	 1.00 1.00 1.00 1.00
724A: Rib	 Very limited Depth to saturated zone Seepage Too sandy Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	saturated zone Too sandy	 1.00 1.00 1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
724A: Rock outcrop	 Not rated 	 	 Not rated 	 	 Not rated 	
726B: Sissabagama	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 1.00	 Somewhat limited Depth to saturated zone	 0.47
733A: Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
771A: Lenroot	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage 	 1.00 1.00 	Very limited Too sandy Seepage Depth to saturated zone Gravel content	 1.00 1.00 0.86 0.05
827A: Scoba	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00 	Very limited Too sandy Seepage Depth to saturated zone Gravel content	 1.00 1.00 0.86 0.03
853C: Frogcreek	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00
Stinnett	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	saturated zone	 1.00 1.00
856B: Stinnett	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00
857B: Frogcreek	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00
857C: Frogcreek	 Very limited Depth to saturated zone Slope	 1.00 0.16	 Very limited Depth to saturated zone Slope	 1.00 0.16	 Very limited Depth to saturated zone Slope	 1.00 0.16

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name			Area sanitary		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
873B: Stanberry	 Very limited Depth to saturated zone Too sandy	 0.99 0.50	 Somewhat limited Depth to saturated zone	 0.75 	 Somewhat limited Depth to saturated zone Too sandy	 0.86 0.50
873C: Stanberry	 Very limited Depth to saturated zone Too sandy Slope	0.99	 Somewhat limited Depth to saturated zone Slope	 0.75 0.37	 Somewhat limited Depth to saturated zone Too sandy Slope	0.86
873D: Stanberry	 Very limited Slope Depth to saturated zone Too sandy	 1.00 0.99 0.50	 Very limited Slope Depth to saturated zone	 1.00 0.75 	 Very limited Slope Depth to saturated zone Too sandy	 1.00 0.86 0.50
905A: Cublake	 Very limited Depth to saturated zone Too sandy 	 1.00 0.50	 Very limited Depth to saturated zone Seepage 	 1.00 1.00	 Very limited Seepage Too sandy Depth to saturated zone	 1.00 0.50 0.47
926A: Flink	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00	 Very limited Depth to saturated zone	1.00
943D: Stanberry	 Very limited Slope Depth to saturated zone Too sandy	 1.00 0.99 0.50	 Very limited Slope Depth to saturated zone	 1.00 0.75 	 Very limited Slope Depth to saturated zone Too sandy	 1.00 0.86
Greenwood	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00 	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00
948A: Billyboy	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage 	 1.00 1.00	 Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.99
970C: Keweenaw	 Very limited Seepage Too sandy Slope	 1.00 0.50 0.37	 Very limited Seepage Slope 	 1.00 0.37 	 Somewhat limited Too sandy Slope Seepage	0.50

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for landfill	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		i i		İ		i i
970C:			 			
Pence	Very limited Seepage	1.00	Very limited Seepage	1.00	Very limited Too sandy	1.00
	Too sandy	1.00	Slope	0.37	Seepage	1.00
	Slope	0.37	blope		Slope	0.37
				į	Gravel content	0.16
Greenwood	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding	1.00	 		Seepage	0.22
970E:		į		į		į
Keweenaw	· -		Very limited	'	Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	0.50
	Too sandy	0.50	 		Seepage 	0.22
Pence	Very limited		Very limited		Very limited	
	Slope	1.00	Slope	1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	 		 		Gravel content	0.16
Greenwood	 Very limited		 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone		saturated zone	!
	Content of	1.00	Seepage	1.00	Content of	1.00
	organic matter		Ponding	1.00	organic matter	
	Seepage	1.00			Ponding	1.00
	Ponding 	1.00	 		Seepage 	0.22
1070C: Fremstadt	 Vorus limited		 Very limited		 Very limited	
FI ems taut	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50	Slope	0.16	Too sandy	0.50
	Slope	0.16			Slope	0.16
G arage	 	į		į		į
Cress	1 _7	1 00	Very limited		Very limited	1.00
	Seepage Too sandy	1.00	Seepage Slope	0.04		1.00
	Slope	0.04	probe	0.01	Slope	0.04
	blope				Gravel content	0.02
1070D:			 		 	
Fremstadt	 Verv limited		 Very limited		 Very limited	
	Slope	1.00		1.00	Slope	1.00
	Seepage	1.00	Seepage	1.00	Seepage	1.00
	Too sandy	0.50	 	į	Too sandy	0.50
Cress	 Very limited		 Very limited		 Very limited	
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Slope	1.00	Seepage	1.00
	Slope	1.00			Slope	1.00
	1	İ	I .	İ	Gravel content	0.02

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitar	У	Area sanitary		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1080B: Spoonerhill	 Very limited Depth to saturated zone Too sandy	 0.99 0.50	 Somewhat limited Depth to saturated zone	 0.75 	 Somewhat limited Depth to saturated zone Too sandy	0.86
Spoonerhill, stony	 Very limited Depth to saturated zone Too sandy	 0.99 0.50	 Somewhat limited Depth to saturated zone	 0.75 	Somewhat limited Depth to saturated zone Too sandy	0.86
Cress	 Very limited Seepage Too sandy 	 1.00 1.00 	 Very limited Seepage 	 1.00 	 Very limited Too sandy Seepage Gravel content	 1.00 1.00 0.02
1653C: Stanberry	 Very limited Depth to saturated zone Too sandy Slope	 0.99 0.50 0.04	Somewhat limited Depth to saturated zone Slope	 0.75 0.04	 Somewhat limited Depth to saturated zone Too sandy Slope	0.86
Parkfalls	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00
Wozny	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
2015: Pits	 Not rated 	 	 Not rated 	 	 Not rated 	
2050: Landfill	 Not rated 	 	 Not rated 	 	 Not rated 	
3011A: Barronett	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00
3125A: Meehan	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Depth to saturated zone Seepage	 1.00 1.00	 Very limited Depth to saturated zone Too sandy Seepage	 1.00 1.00 1.00
3126A: Wurtsmith	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage 	 1.00 1.00	 Very limited Too sandy Seepage Depth to saturated zone	 1.00 1.00 0.86

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary landfill		Daily cover for	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3276A: Au Gres	 Very limited Depth to saturated zone Seepage Too sandy	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage	 1.00 1.00	 Very limited Depth to saturated zone Too sandy Seepage	 1.00 1.00 1.00
3312B: Glendenning, very stony	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00	 	
Glendenning	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	1.00	 Very limited Depth to saturated zone	1.00
3336A: Fenander	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Depth to saturated zone Ponding	1.00
3403A: Loxley	Very limited Depth to saturated zone Content of organic matter Seepage Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	saturated zone	 1.00 1.00 1.00 0.16
Beseman	Very limited Depth to saturated zone Content of organic matter Ponding	 1.00 1.00 1.00	 Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	saturated zone	 1.00 1.00 1.00 0.22
Dawson	Very limited Depth to saturated zone Seepage Content of organic matter Ponding	 1.00 1.00 1.00 	 Very limited Depth to saturated zone Seepage Ponding	 1.00 1.00 1.00	saturated zone Content of	 1.00 1.00 1.00 0.16
3424C: Frogcreek	 Very limited Depth to saturated zone	 1.00 	 Very limited Depth to saturated zone	 1.00	 Very limited Depth to saturated zone	 1.00
Magroc	 Very limited Depth to saturated zone Depth to bedrock Too sandy	1.00	 Very limited Depth to saturated zone Depth to bedrock	 1.00 0.42	 Very limited Depth to saturated zone Too sandy Depth to bedrock	1.00

Table 19b.--Sanitary Facilities--Continued

Map symbol and soil name	Trench sanitary		Area sanitary		Daily cover for landfill	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
	limiting features	1	IIMICING Teacures	1	IIMICING Teacures	+
3424C:	 	i	 	l I	 	1
Stinnett	 Very limited	i	 Very limited	İ	 Very limited	i
	Depth to	1.00	: -	1.00	Depth to	1.00
	saturated zone	į	saturated zone	į	saturated zone	į
Rock outcrop	 Not rated		 Not rated		 Not rated	
3446A:	 		 		 	1
Newson	 Verv limited	i	 Very limited		 Very limited	i
	Depth to	1.00	: -	1.00	: -	1.00
	saturated zone	i	saturated zone	İ	saturated zone	i
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00	Ponding	1.00	Seepage	1.00
	Ponding	1.00			Ponding	1.00
3448B:	 		 		 	
Grettum	Very limited	į	Very limited	İ	Very limited	į
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00		
	Too sandy	1.00	l	l I	l	
3448C:	 		 		 	
Grettum	Very limited	İ	Very limited	ĺ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Slope	0.04
	Too sandy	1.00	Slope	0.04		1
	Slope	0.04	l I	l I	l	
3516A:	 		 		 	
Slimlake	Very limited	İ	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00	Too sandy	1.00
	saturated zone		saturated zone		Seepage	1.00
	Seepage	1.00	Seepage	1.00	Depth to	0.47
	Too sandy	1.00	l	l I	saturated zone	
3629B:						
Perida	Very limited		Very limited		Very limited	1
	Seepage	1.00	Seepage	1.00	Too sandy	1.00
	Too sandy	1.00			Seepage	1.00
	Depth to	0.09				
	saturated zone		 		 	
M-W:						İ
Miscellaneous water	Not rated		Not rated		Not rated	1
W:	 		 	 	 	
Water	Not rated	i	 Not rated	i	 Not rated	i
	i	i	İ	i	İ	i

Table 20a. -- Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The ratings given for the thickest layer are for the thickest layer above and excluding the bottom layer. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	 Potential as sou: of gravel	rce	Potential as source of sand		
	Rating class	Value	Rating class	Value	
3A: Totagatic	Bottom layer	 0.00 0.00		 0.44 0.64	
Bowstring	Bottom layer	 0.00 0.00		 0.00 0.00	
Ausable	Bottom layer	0.00		 0.00 0.58	
22A: Comstock		0.00	 Poor Bottom layer Thickest layer	 0.00 0.00	
24A: Poskin	Thickest layer	0.00		0.00	
27A: Scott Lake	Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.02 0.50	
28B:	 	 	 	 	
Haugen, very stony	Bottom layer	1	Fair Bottom layer Thickest layer	 0.02 0.04	
Haugen	Bottom layer	 0.00 0.00 	· -	 0.02 0.04 	
Rosholt, very stony	Thickest layer	 0.00 0.16 		 0.02 0.50 	
Rosholt	Thickest layer	 0.00 0.16	•	 0.02 0.50	
28C: Haugen, very stony	Bottom layer	 0.00 0.00	· -	 0.02 0.04	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	urce	Potential as source		
	Rating class	Value	Rating class	Value	
28C: Haugen	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.02 0.04	
Rosholt, very stony	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.02	
Rosholt	 Fair Thickest layer Bottom layer	0.00	-	0.02	
33B: Chetek	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03	
33C: Chetek	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03	
38A: Rosholt	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.02	
38B: Rosholt	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.02	
38C: Rosholt	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.02	
38D: Rosholt	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.02	
42D: Amery	 Poor Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.03	
43B: Antigo	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00	
43C: Antigo	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00	
43D: Antigo	 Fair Thickest layer Bottom layer 	0.00	 Fair Thickest layer Bottom layer	 0.00 0.50	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	ource	Potential as source of sand		
	Rating class	Value	Rating class	Value	
48A: Brill	 Fair Thickest layer Bottom layer	 0.00 0.08	 Fair Thickest layer Bottom layer	 0.00 0.50	
63A: Crystal Lake	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00	
63B: Crystal Lake	 Poor Bottom layer Thickest layer 	0.00	 Poor Bottom layer Thickest layer	0.00	
63C: Crystal Lake	 Poor Bottom layer Thickest layer	0.00	:	0.00	
63E: Crystal Lake	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00	
64A: Totagatic	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.44 0.64	
Winterfield	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.10	
69B: Keweenaw	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.10	
Sayner	 Fair Thickest layer Bottom layer 	 0.00 0.08	 Fair Bottom layer Thickest layer 	 0.43 0.72	
Vilas	Poor Bottom layer Thickest layer	0.00	Fair Thickest layer Bottom layer	 0.72 0.86	
69C: Keweenaw	 Poor Bottom layer Thickest layer	0.00	:	 0.10 0.11	
Sayner	 Fair Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	 0.43 0.72	
Vilas	 Poor Bottom layer Thickest layer 	 0.00 0.00	 Fair Thickest layer Bottom layer 	 0.72 0.86	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	Potential as source of sand		
	Rating class	Value	Rating class	Value	
69E:			 		
Keweenaw	Poor	i	Fair	i	
	Bottom layer	0.00	Bottom layer	0.10	
	Thickest layer	0.00	Thickest layer	0.11	
Sayner	Fair	İ	 Fair		
	Thickest layer	0.00	Bottom layer	0.43	
	Bottom layer	0.08	Thickest layer 	0.72	
Vilas	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.72	
	Thickest layer	0.00	Bottom layer	0.86	
74B:	į	į		į	
Vilas	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.72	
	Thickest layer	0.00	Bottom layer 	0.86	
74C:	į I Barara	İ	 	İ	
Vilas	Poor Bottom layer	0.00	Fair	0.72	
	Thickest layer	0.00	Thickest layer Bottom layer	0.72	
74D: Vilas	Poor	l i	 Fair		
1111	Bottom layer	0.00		0.72	
	Thickest layer	0.00	Bottom layer	0.86	
100B:			 		
Menahga	Poor		Fair		
	Bottom layer	0.00	Thickest layer	0.34	
	Thickest layer	0.00	Bottom layer 	0.64	
100C:	<u> </u>	į		į	
Menahga	Poor	0.00	Fair Thickest layer	0.34	
	Bottom layer Thickest layer	0.00	Bottom layer	0.54	
100D: Menahga	Poor	l I	 Fair		
.	Bottom layer	0.00	Thickest layer	0.34	
	Thickest layer	0.00	Bottom layer	0.64	
127D:		l I			
Amery	Poor		Fair		
	Thickest layer	0.00	Bottom layer	0.03	
	Bottom layer	0.00	Thickest layer 	0.03	
Rosholt	1	i	Fair	İ	
	Thickest layer	0.00	Thickest layer	0.02	
	Bottom layer	0.16	Bottom layer 	0.50	
127E:	į_	į		į	
Amery	Poor		Fair		
	Thickest layer Bottom layer	0.00	Bottom layer Thickest layer	0.03	
	Doccom rayer		 		
Rosholt	Fair	1	Fair		
	Thickest layer	0.00	Thickest layer	0.02	
	Bottom layer	0.16	Bottom layer	0.50	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as sou of gravel	ırce	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
156B: Magnor, very stony	 Poor Thickest layer Bottom layer	 0.00 0.00	 Fair Bottom layer Thickest layer	 0.00 0.04
Magnor	Poor Poor Thickest layer Bottom layer	į	 Fair Bottom layer Thickest layer	 0.00 0.04
157B: Freeon, very stony	 Poor Bottom layer Thickest layer	 0.00 0.00	 Fair Bottom layer Thickest layer	0.03
Freeon	 Poor Bottom layer Thickest layer 	 0.00 0.00	 Fair Bottom layer Thickest layer 	 0.03 0.04
157C: Freeon, very stony	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.03 0.04
Freeon	 Poor Bottom layer Thickest layer 	 0.00 0.00	 Fair Bottom layer Thickest layer 	 0.03 0.04
160A: Oesterle	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.04
182B: Padus	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.02
182C: Padus	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.02
192A: Worcester	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.04
193A: Minocqua	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
215B: Pence	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
215C: Pence	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as source of gravel		 Potential as sou of sand	rce
	Rating class	Value	Rating class	Value
215D: Pence	 Fair Thickest layer Bottom layer	 0.00 0.08	:	 0.03 0.50
315A: Rib	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
337A: Plover	 Poor Bottom layer Thickest layer	0.00	:	0.00
368B: Mahtomedi	 Fair Thickest layer Bottom layer	0.00	:	0.64
Cress	 Fair Thickest layer Bottom layer 		 Fair Thickest layer Bottom layer 	 0.08 0.50
368C: Mahtomedi	 Fair Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	 0.64 0.64
Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	 0.08 0.50
368D: Mahtomedi	 Fair Thickest layer Bottom layer	0.00	:	0.64
Cress	 Thickest layer Bottom layer	0.00	:	0.08
371A: Croswell	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.40
380B: Cress	 Fair Thickest layer Bottom layer	0.00		0.08
Rosholt	 Fair Thickest layer Bottom layer 	 0.00 0.16	 Fair Thickest layer Bottom layer 	 0.02 0.50
380C: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	:	0.08

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	urce	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
380C: Rosholt	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.02
380D: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.08
Rosholt	 Fair Thickest layer Bottom layer 	 0.00 0.16	 Fair Thickest layer Bottom layer 	 0.02 0.50
383B: Mahtomedi	 Fair Thickest layer Bottom layer	 0.00 0.01	 Fair Thickest layer Bottom layer	0.64
383C: Mahtomedi	 Fair Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.64
383D: Mahtomedi	 Fair Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	 0.64 0.64
396B: Friendship	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.69 0.86
Wurtsmith	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.56 0.82
Grayling	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.64 0.64
397A: Perchlake	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.44
399B: Grayling	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.64
399C: Grayling	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.64
399D: Grayling	 Poor Bottom layer Thickest layer	 0.00 0.00	 Fair Thickest layer Bottom layer 	 0.64 0.64

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	urce	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
405A:	 		 	
Lupton	Poor	i	Poor	i
-	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
Cathro	 Poor		 Fair	
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.03
Tawas	Poor	i	 Fair	i
	Bottom layer	0.00	Thickest layer	0.00
	Thickest layer 	0.00	Bottom layer	0.20
406A:				
Loxley	Poor		Poor	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.00
	Inickest layer		INICKESC TAYET	
407A:	l Danier			-
Seelyeville	Poor Bottom layer	0.00	Poor Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
	_	į	_	į
Markey	Poor Thickest layer	0.00	Fair Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.64
		į	_	į
410A: Seelyeville	 Poor	l I	 Poor	l I
	Bottom layer	0.00	!	0.00
	Thickest layer	0.00	Thickest layer	0.00
Cathro	 Poor		 Fair	
	Bottom layer	0.00	-	0.00
	Thickest layer	0.00	Bottom layer	0.03
412A:		İ		İ
Rifle	Poor		Poor	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.00
	Inickest layer		Inickest layer	
Tacoosh	Poor		Fair	
	Bottom layer Thickest layer	0.00	Thickest layer Bottom layer	0.00
	Inickest layer		Boccom Tayer	
415A:			 Poor	
Greenwood	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.00
420D				
439B: Graycalm	 Poor		 Fair	
-	Bottom layer	0.00	Bottom layer	0.18
	Thickest layer	0.00	Thickest layer	0.47
Menahga	 Poor		 Fair	
	1	1		1
	Bottom layer Thickest layer	0.00	Thickest layer Bottom layer	0.34

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	Potential as sou of sand	rce
	Rating class	Value	Rating class	Value
439C: Graycalm	 Poor		 Fair	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.18
Menahga	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.34
439D:	 	l	 	l
Graycalm	Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.18
Menahga	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.34
441C:	 	l	 	l
Freeon	Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.03
Cathro	 Poor Bottom layer Thickest layer	0.00	 Not rated 	
442C:	 			ļ
Haugen	Poor Bottom layer Thickest layer	0.00	· -	0.02
Greenwood	 Poor Bottom layer Thickest layer	0.00	· -	0.00
443D:	 		 	
Amery	Poor Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.03
Greenwood	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00
461A:			 	
Bowstring	Poor Bottom layer Thickest layer	0.00	Poor Bottom layer Thickest layer	0.00
484A: Greenwood	 Poor Bottom layer Thickest layer	 0.00 0.00	 Poor Bottom layer Thickest layer	 0.00 0.00
Beseman	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	urce	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
4050		1		-
495B: Karlsborg	Poor	l	 Fair	l I
Maribborg	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00		0.72
		ļ		ļ
Grettum			Fair Thickest layer	
	Bottom layer Thickest layer	0.00		0.36
Perida	Poor	ĺ	Fair	ĺ
	Bottom layer	0.00		0.58
	Thickest layer	0.00	Thickest layer	0.72
495C:	 	i	 	i
Karlsborg	Poor	j	Fair	j
	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.72
Grettum	Poor		 Fair	
02000	Bottom layer		Thickest layer	0.36
	Thickest layer		Bottom layer	0.58
		ļ		ļ
Perida	Poor	1	Fair	
	Bottom layer Thickest layer	0.00	Bottom layer Thickest layer	0.58
	Inickest layer	0.00	Inickest layer	0.72
495D:	j	i	İ	i
Karlsborg			Fair	
	Bottom layer		Thickest layer	0.00
	Thickest layer	0.00	Bottom layer	0.72
Grettum	Poor	i	 Fair	i
	Bottom layer	0.00	Thickest layer	0.36
	Thickest layer	0.00	Bottom layer	0.58
Perida	Poor		 Fair	
reriua	Bottom layer		Bottom layer	0.58
	Thickest layer	0.00	· -	0.72
	!	ļ	!	
497A: Meenon	 Poor		 Fair	
Meenon	Bottom layer	0.00	Thickest layer	0.72
	Thickest layer	0.00		0.72
	İ	ĺ	İ	İ
515A:	 		 	
Manitowish	Fair Thickest layer	0.00	Fair Thickest layer	0.03
	Bottom layer	0.08	Bottom layer	0.50
521A:	[1	[
Dody			Fair	
	Bottom layer Thickest layer	0.00	:	0.00
	Inickest layer	0.00	Boccom Tayer	0.13
524E:	į	į	İ	i
Rock outcrop	Not rated	Ţ	Not rated	Ţ
T	 Parasa	-	 	-
Frogcreek	Poor Thickest layer	0.00	Fair Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.03
	j	į		İ

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	Potential as sou of sand	irce
	Rating class	Value	Rating class	Value
524E: Metonga	 Poor Thickest layer Bottom layer	 0.00 0.00	 Fair Thickest layer Bottom layer	 0.00 0.04
542B: Haugen, very stony	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.02
Haugen	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.02
542C: Haugen, very stony	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.02
Haugen	 Poor Bottom layer Thickest layer 	0.00	 Fair Bottom layer Thickest layer	 0.02 0.04
543B: Anigon	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
543C2: Anigon	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
544F: Menahga	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	 0.34 0.64
Mahtomedi	 Fair Thickest layer Bottom layer 	 0.00 0.01	 Fair Bottom layer Thickest layer 	 0.64 0.64
555A: Fordum	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
574B: Sayner	 Fair Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.43
574C: Sayner	 Fair Thickest layer Bottom layer	 0.00 0.08	 Fair Bottom layer Thickest layer	0.43
574E: Sayner	 Fair Thickest layer Bottom layer	 0.00 0.08	 Fair Bottom layer Thickest layer	0.43

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as sou of gravel 	rce	 Potential as sou of sand 	rce
	Rating class	Value	Rating class	Value
579B: Parkfalls	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
600A: Haplosaprists	 Not rated		 Not rated	
Psammaquents	 Not rated 		 Not rated	
615B: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	 0.08 0.50
615C: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	 0.08 0.50
615D: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16	 Fair Thickest layer Bottom layer	0.08
623A: Capitola	 Poor Thickest layer Bottom layer	0.00	:	 0.00 0.04
624A: Ossmer	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	 0.00 0.50
632A: Aftad	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00
632B: Aftad	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00
632C: Aftad	 Poor Bottom layer Thickest layer	0.00		0.00
633F: Pence	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
Padus	 Fair Thickest layer Bottom layer 	 0.00 0.08	 Fair Thickest layer Bottom layer 	 0.02 0.50

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	urce	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
648B: Sconsin	 Fair Thickest layer Bottom layer	 0.00 0.25	 Fair Thickest layer Bottom layer	 0.00 0.01
670C: Keweenaw	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.10
Pence	 Fair Thickest layer Bottom layer 	 0.00 0.08	 Fair Thickest layer Bottom layer 	0.03
670E: Keweenaw	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.10
Pence	 Fair Thickest layer Bottom layer 	 0.00 0.08	 Fair Thickest layer Bottom layer 	0.03
671B: Spoonerhill, stony	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.11 0.11
Spoonerhill	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.11
680B: Stanberry, stony	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
Pence, stony	 Fair Thickest layer Bottom layer 	0.00	 Fair Thickest layer Bottom layer	0.03
683A: Tipler	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
706A: Winterfield	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
Totagatic	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.44
724A: Rib	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
Rock outcrop	 Not rated 		 Not rated 	

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as sou of gravel	irce	Potential as source of sand	
	Rating class	Value	Rating class	Value
726B:	l I	1	 	l I
Sissabagama	Poor	i	Fair	i
	Bottom layer	0.00	Bottom layer	0.00
	Thickest layer	0.00	Thickest layer	0.36
733A:			 	
Wozny	Poor		Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
771A:	İ	İ		i
Lenroot	Poor	1	Fair	
	Bottom layer	0.00	· -	0.00
	Thickest layer	0.00	Thickest layer 	0.54
827A:	İ	į	İ	į
Scoba	Fair		Fair	
	Thickest layer	0.00	:	0.02 0.50
	Bottom layer	0.16	BOCCOM Tayer	0.50
853C:	į	į	į	į
Frogcreek	Poor		Fair	
	Thickest layer Bottom layer	0.00	Thickest layer Bottom layer	0.03 0.09
Stinnett	Poor	1	Fair	
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
Wozny	Poor	i	Fair	i
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
856B:	İ		 	
Stinnett	Poor	İ	Fair	ĺ
	Thickest layer	0.00	Thickest layer	0.00
	Bottom layer	0.00	Bottom layer	0.09
857B:		i		İ
Frogcreek	Poor	1	Fair	
	Thickest layer	0.00	Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.09
857C:	İ	į	İ	į
Frogcreek			Fair	
	Thickest layer Bottom layer	0.00	Thickest layer Bottom layer	0.03 0.09
	Boccom Tayer		Boccom Tayer	
873B:	į	İ		İ
Stanberry		1	Fair	
	Thickest layer Bottom layer	0.00	Thickest layer Bottom layer	0.03 0.07
	Boccom Tayer		Boccom Tayer	
873C:				ļ
Stanberry		1	Fair	
	Thickest layer Bottom layer	0.00	-	0.03 0.07
873D:				
Stanberry	Poor Thickest layer	0.00	Fair Thickest layer	0.03
	Bottom layer	0.00	Bottom layer	0.03
	i	į	į	į

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	 Potential as sou of sand 	irce
	Rating class	Value	Rating class	Value
905A: Cublake	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.00
926A: Flink	 Poor Bottom layer Thickest layer	0.00		0.00
943D: Stanberry	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
Greenwood	Poor Bottom layer Thickest layer	0.00	Poor Bottom layer Thickest layer	0.00
948A: Billyboy	 Fair Thickest layer Bottom layer	0.00	· -	0.00
970C: Keweenaw	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.10 0.11
Pence	 Fair Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
Greenwood	 Not rated 		 Not rated 	
970E: Keweenaw	 Poor Bottom layer Thickest layer	0.00	-	0.10
Pence	 Fair Thickest layer Bottom layer 	0.00	 Fair Thickest layer Bottom layer	0.03
Greenwood	Not rated	į į	Not rated	į į
1070C: Fremstadt	 Poor Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	 0.07 0.07
Cress	 Fair Thickest layer Bottom layer 	 0.00 0.16	 Fair Thickest layer Bottom layer	 0.08 0.50
1070D: Fremstadt	 Poor Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.07

Table 20a.--Construction Materials--Continued

Map symbol and soil name	 Potential as so of gravel 	ource	 Potential as sou of sand 	ırce
	Rating class	Value	Rating class	Value
1070D: Cress	 Fair Thickest layer Bottom layer	 0.00 0.16		 0.08 0.50
1080B: Spoonerhill	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.10
Spoonerhill, stony	 Poor Bottom layer Thickest layer	 0.00 0.00	 Fair Bottom layer Thickest layer	0.11
Cress	 Fair Thickest layer Bottom layer 	 0.00 0.16	 Fair Thickest layer Bottom layer	0.08
1653C: Stanberry	 Poor Thickest layer Bottom layer	0.00	:	0.03
Parkfalls	 Poor Thickest layer Bottom layer 	0.00	:	0.03
Wozny	 Poor Thickest layer Bottom layer	0.00	:	0.00
2015:			 	
Pits	Not rated 		Not rated 	
2050: Landfill	 Not rated 		 Not rated 	
3011A: Barronett	 Poor Bottom layer Thickest layer	 0.00 0.00	 Poor Bottom layer Thickest layer	0.00
3125A: Meehan	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.48
3126A: Wurtsmith	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.54
3276A: Au Gres	 Poor Bottom layer Thickest layer	 0.00 0.00	 Fair Thickest layer Bottom layer	 0.72 0.86
3312B: Glendenning, very stony	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.03 0.04

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	urce	 Potential as sou of sand	ırce
	Rating class	Value	Rating class	Value
3312B: Glendenning	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	 0.03 0.04
3336A: Fenander	 Poor Bottom layer Thickest layer	 0.00 0.00	 Poor Bottom layer Thickest layer	0.00
3403A: Loxley	 Poor Bottom layer Thickest layer	0.00	 Poor Bottom layer Thickest layer	0.00
Beseman	Poor Bottom layer Thickest layer	0.00	Poor Bottom layer Thickest layer	0.00
Dawson	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
3424C: Frogcreek	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.03
Magroc	 Poor Thickest layer Bottom layer	0.00	 Fair Bottom layer Thickest layer	0.10
Stinnett	 Poor Thickest layer Bottom layer	0.00	 Fair Thickest layer Bottom layer	0.00
Rock outcrop	 Not rated		 Not rated	
3446A: Newson	 Poor Bottom layer Thickest layer	0.00	 Fair Bottom layer Thickest layer	0.82
3448B: Grettum	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.36
3448C: Grettum	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.36
3516A: Slimlake	 Poor Bottom layer Thickest layer	0.00	 Fair Thickest layer Bottom layer	0.54
3629B: Perida	 Poor Bottom layer Thickest layer 	0.00	 Fair Bottom layer Thickest layer	0.58

Table 20a.--Construction Materials--Continued

Map symbol and soil name	Potential as so of gravel	ource	Potential as source	
	Rating class	Value	Rating class	Value
M-W: Miscellaneous water	 Not rated 		 Not rated 	
W: Water	 Not rated 		 Not rated	

Table 20b.--Construction Materials

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features		Rating class and limiting features	Valu
3A: Totagatic	Too sandy Low content of organic matter	0.00	: -	!	 Poor Too sandy Depth to saturated zone	 0.00 0.00
Bowstring	Too acid Good 	0.68 	 Poor Depth to saturated zone 	!	 Poor Depth to saturated zone Content of organic matter	 0.00 0.00
Ausable	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.97	: -	!	 Poor Too sandy Depth to saturated zone	 0.00 0.00
22A: Comstock	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.90	saturated zone	!	saturated zone	 0.00 0.98
24A: Poskin	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	 Poor Depth to saturated zone	!	 Poor Depth to saturated zone Hard to reclaim (rock fragments)	
27A: Scott Lake	 Fair Low content of organic matter Too acid Droughty	 0.12 0.68 0.95	 Fair Depth to saturated zone 	1	saturated zone	
28B: Haugen, very stony	 Fair Low content of organic matter Too acid 	 0.12 0.54 	 Fair Depth to saturated zone 	 0.53 	Poor Hard to reclaim (dense layer) Rock fragments Depth to saturated zone Hard to reclaim (rock fragments) Too acid	 0.00 0.00 0.53 0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		 Potential as sou of roadfill 	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>				<u> </u>
28B:		İ		ĺ	İ	İ
Haugen			Fair		Poor	
	Low content of	0.12	Depth to	0.53	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.54	 		Rock fragments	0.00
	 		 		Depth to saturated zone	0.53
	 		 	İ	!	0.92
				i	(rock fragments)	
		i		i	Too acid	0.98
		i		į		į
Rosholt, very stony	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.12
	organic matter				Hard to reclaim	0.32
	Droughty	0.60		ļ	(rock fragments)	
	Too acid	0.68	 		 	
Rosholt	 Fair		 Good	İ	 Fair	ì
	Low content of	0.12		i	Rock fragments	0.12
	organic matter	İ		İ	Hard to reclaim	0.50
	Droughty	0.67		ĺ	(rock fragments)	İ
	Too acid	0.68		ļ		ļ
28C:	l I		l I		l	
Haugen, very stony	 Fair		 Fair	1	Poor	
naugen, very seem	Low content of	0.12		0.53	!	0.00
	organic matter		saturated zone	1	(dense layer)	1
	Too acid	0.54		į	Rock fragments	0.00
					Depth to	0.53
					saturated zone	
					!	0.92
				ļ	(rock fragments)	1
	İ		İ		Slope	0.96
	 		 		Too acid	0.98
Haugen	 Fair	i	 Fair	İ	Poor	ì
	Low content of	0.12	Depth to	0.53	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.54			Rock fragments	0.00
		!		ļ	Depth to	0.53
					saturated zone	
	l I		l I			0.92
	 		 	1	(rock fragments) Slope	0.96
	 		 	i	Too acid	0.98
		į		į		į
Rosholt, very stony			Good		Fair	
	Low content of	0.12		ļ	Rock fragments	0.12
	organic matter	10.00	 -	Į Į	Hard to reclaim	0.32
	Droughty Too acid	0.60	 		(rock fragments) Slope	0.96
Rosholt	Fair	İ	Good	İ	Fair	İ
	Low content of	0.12		ļ	Rock fragments	0.12
	organic matter			ļ	Hard to reclaim	0.50
	Droughty Too acid	0.67		ļ	(rock fragments)	0.96
		0.68			Slope	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as source of roadfill		Potential as source of topsoil 		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
33B:							
Chetek	Poor		Good		Poor		
	Too sandy	0.00			Too sandy	0.00	
	Droughty	0.06	ĺ	İ	Rock fragments	0.00	
	Low content of	0.12			Hard to reclaim	0.32	
	organic matter Too acid	0.84	 		(rock fragments)		
225						į	
33C:						1	
Chetek			Good		Poor		
	Too sandy	0.00	!	!	Too sandy	0.00	
	Droughty	0.06	!	!	Rock fragments	0.00	
	Low content of	0.12	!	!	Hard to reclaim	0.32	
	organic matter				(rock fragments)	1	
	Too acid	0.84	 		Slope 	0.96	
38A: Rosholt	 	į	Cood	į		į	
ROSHOIC	!		Good		Fair	10 10	
	Low content of	0.12	 		Rock fragments Hard to reclaim	0.12	
	organic matter		 		!	0.50	
	Droughty	0.67	 		(rock fragments)	1	
	Too acid	0.68 	 		 		
38B:							
Rosholt	!		Good		Fair		
	Low content of	0.12			Rock fragments	0.12	
	organic matter				Hard to reclaim	0.50	
	Droughty	0.67			(rock fragments)	!	
	Too acid	0.68	 		 		
38C:	İ		İ	İ	İ	į	
Rosholt	Fair		Good		Fair		
	Low content of	0.12			Rock fragments	0.12	
	organic matter				Hard to reclaim	0.50	
	Droughty	0.67			(rock fragments)		
	Too acid	0.68	 		Slope 	0.96	
38D:	<u>.</u>	į		į		į	
Rosholt			Fair	1	Poor		
	Low content of	0.12	Slope	0.98	Slope	0.00	
	organic matter				Rock fragments	0.12	
	Droughty Too acid	0.67	 		Hard to reclaim (rock fragments)	0.50	
100	į	į		į		į	
42D: Amery	 Fair		 Fair		 Poor		
-	Low content of	0.12	Slope	0.98	Slope	0.00	
	organic matter	İ	_	İ	Rock fragments	0.00	
	Too acid	0.54			Hard to reclaim	0.03	
					(dense layer)	1	
	İ	İ	İ	İ	Hard to reclaim	0.92	
					(rock fragments)		
	 		 		Too acid	0.98	
43B:			 		 		
Antigo	Fair		Good		Fair		
	Low content of	0.12			Hard to reclaim	0.68	
5-	Low Content of	1	•	'	•		
	organic matter		İ	į	(rock fragments)	ĺ	
	!	0.68		į Į	rock fragments)	İ İ	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		 Potential as sou of roadfill 	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43C: Antigo	Low content of organic matter Too acid	 0.12 0.68 0.90	 Good 	 	: -	 0.63 0.68
43D: Antigo	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	 Fair Slope 	 0.08 	: -	 0.00 0.68
48A: Brill	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	 Fair Depth to saturated zone 	 0.14 	 Fair Depth to saturated zone Hard to reclaim (rock fragments)	
63A: Crystal Lake	Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.90	 Fair Depth to saturated zone 	 0.53 	saturated zone	 0.53 0.98
63B: Crystal Lake	Low content of organic matter Too acid	 0.12 0.54 0.90	 Fair Depth to saturated zone	 0.53 	saturated zone	 0.53 0.98
63C: Crystal Lake	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.90	saturated zone	 0.53 	saturated zone	 0.53 0.96 0.98
63E: Crystal Lake	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.90	 Poor Slope Depth to saturated zone	 0.00 0.89 	:	0.00
64A: Totagatic	Poor Too sandy Low content of organic matter Too acid	 0.00 0.12 0.68	 Poor Depth to saturated zone 	 0.00 	 Poor Too sandy Depth to saturated zone	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
64A:	 		[[
Winterfield	Poor	i	Poor	i	Poor	i
	Too sandy	0.00	Depth to	0.00	!	0.00
	Wind erosion	0.00	saturated zone		Depth to	0.00
	Low content of	0.12	İ	i	saturated zone	i
	organic matter	i	!	i	!	0.88
	Droughty	0.48		į		į
69B:	 				 	
Keweenaw	Poor	i	Good	İ	Fair	i
	Wind erosion	0.00	İ	İ	Too sandy	0.04
	Too sandy	0.04	İ	İ	Rock fragments	0.88
	Low content of	0.12	İ	İ	İ	İ
	organic matter	İ	İ	İ	İ	İ
	Too acid	0.68		į		į
Sayner	 Poor		 Good		 Poor	
-	Too sandy	0.00	İ	i	Too sandy	0.00
	Wind erosion	0.00	İ	i	-	0.00
	Droughty	0.01		İ	Hard to reclaim	0.50
	Low content of	0.12		İ	(rock fragments)	i
	organic matter	i	İ	i	i	i
	Too acid	0.54		į		į
Vilas	 Poor		 Good		 Poor	
	Too sandy	0.00	!	i	Too sandy	0.00
	Wind erosion	0.00		İ	Rock fragments	0.97
	Low content of	0.12		İ	İ	i
	organic matter	i		İ	İ	i
	Too acid	0.68	İ	İ	İ	İ
	Droughty	0.96				
69C:	 				 	
Keweenaw	Poor	i	Good	İ	Fair	i
	Wind erosion	0.00	İ	İ	Too sandy	0.04
	Too sandy	0.04		İ	Slope	0.84
	Low content of	0.12			Rock fragments	0.88
	organic matter					
	Too acid	0.68				
Sayner	 Poor		 Good		 Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.01			Hard to reclaim	0.50
	Low content of	0.12			(rock fragments)	
	organic matter				Slope	0.84
	Too acid	0.54	 		 	
Vilas	!	į	Good		Poor	į
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Slope	0.84
	Low content of	0.12			Rock fragments	0.97
	organic matter	[!	!
	Too acid	0.68			!	!
	Droughty	0.96	t contract the contract to the	1	·	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69E:						
Keweenaw	Poor		Poor		Poor	
	Wind erosion	0.00	Slope	0.00		0.00
	Too sandy	0.04	 	i	Too sandy	0.04
	Low content of	0.12	İ	İ	Rock fragments	0.88
	organic matter Too acid	 0.68	 		 	
Sayner	Poor		 Poor		 Poor	
buyiici	Too sandy	0.00	Slope	0.00		0.00
	Wind erosion	0.00			Too sandy	0.00
	Droughty	0.01	İ	į	Rock fragments	0.00
	Low content of	0.12	İ	İ	Hard to reclaim	0.50
	organic matter				(rock fragments)	
	Too acid	0.54	 		 	
Vilas	Poor		Poor	İ	Poor	İ
	Too sandy	0.00	Slope	0.00	:	0.00
	Wind erosion	0.00			Too sandy	0.00
	Low content of organic matter	0.12	 -		Rock fragments	0.97
	Too acid	0.68	 		 	l I
	Droughty	0.96	 			İ
				İ		İ
74B:	 Page		l a		I Donor	
Vilas	Too sandy	0.00	Good		Poor Too sandy	0.00
	Wind erosion	0.00	 		Rock fragments	0.97
	Low content of	0.12	 	i		
	organic matter	i		i		i
	Too acid	0.68	İ	İ		Ì
	Droughty	0.96				
74C:			 			l I
Vilas	Poor	į	Good	į	Poor	į
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00		!	Slope	0.63
	Low content of	0.12			Rock fragments	0.97
	organic matter Too acid	0.68	 		 	l I
	Droughty	0.96				
74D:						
Vilas	Poor	i	 Fair		Poor	i i
	Too sandy	0.00	Slope	0.08	Slope	0.00
	Wind erosion	0.00	İ	i	Too sandy	0.00
	Low content of	0.12	İ	İ	Rock fragments	0.97
	organic matter					
	Too acid	0.68		!		ļ
	Droughty	0.96	 		 	
100B:						
Menahga			Good		Poor	
	Wind erosion	0.00	!	[Too sandy	0.00
	Too sandy	0.00		1	Too acid	0.88
	Low content of	0.12	 -	1		Į.
	organic matter	0.23	 	1] 	1
	Droughty Too acid	0.50	 		 	I I
	100 4014	0.50	I .	1	I .	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	irce	Potential as sour	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
100C:						
Menahga	Poor Wind erosion Too sandy	0.00	Good 		Poor Too sandy Too acid	0.00
	Low content of organic matter Too acid Droughty	0.12 0.50 0.60	 	 	Slope -	0.96
100D:		1	 	1	 	1
Menahga	Poor		 Fair		Poor	
Menanga	Wind erosion	0.00	Slope	0.32	!	0.00
	Too sandy	0.00	biope	0.52	Too sandy	0.00
	Low content of	0.12	I 	i i	Too acid	0.88
	organic matter		i I			
	Too acid	0.50		i		i
	Droughty	0.60				į
127D:			 		 	
Amery	Fair		Fair		Poor	
	Low content of	0.12	Slope	0.98	Slope	0.00
	organic matter				Rock fragments	0.00
	Too acid	0.54			!	0.03
					(dense layer)	
					!	0.92
					(rock fragments)	1
			 		Too acid 	0.98
Rosholt	Fair	į	Fair		Poor	İ
	Low content of	0.12	Slope	0.98	Slope	0.00
	organic matter				Rock fragments	0.12
	Droughty	0.60			Hard to reclaim	0.32
	Too acid	0.68	 		(rock fragments)	l I
127E:		į				
Amery	!	!	Poor	!	Poor	
	Low content of	0.12	Slope	0.00	Slope	0.00
	organic matter				Rock fragments	0.00
	Too acid	0.54	 		Hard to reclaim (dense layer)	0.03
			 			0.92
					(rock fragments)	
			l		Too acid	0.98
Rosholt	 Fair		 Poor		 Poor	
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Droughty	0.60	 	l I	Rock fragments Hard to reclaim	0.12
	Too acid	0.68	 		(rock fragments)	
15CD.						
156B: Magnor, very stony	 Fair		 Poor		 Poor	
	Low content of organic matter	0.12	Depth to saturated zone	0.00	Hard to reclaim (dense layer)	0.00
	Too acid	0.20	Sacurated zone	1	Depth to	0.00
	Water erosion	0.20	! 		saturated zone	
			! !	i		0.00
					Rock fragments	0.00
			 		Hard to reclaim	0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		 Potential as sou of roadfill 	rce	Potential as sour of topsoil	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>	
156B: Magnor	 Fair	 	 Poor	 	 Poor	 	
	Low content of organic matter Too acid Water erosion	0.12	!	0.00	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00	
	 		 		(rock fragments)		
157B:	İ	i		i		i	
Freeon, very stony	Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	Poor Depth to saturated zone	 0.00 	Poor Depth to saturated zone Rock fragments Hard to reclaim (rock fragments)	1	
Freeon	 Fair Low content of organic matter Too acid	 0.12 0.61	 Poor Depth to saturated zone 	 0.00 	 Poor Depth to saturated zone Rock fragments	 0.00 0.00	
	Water erosion	0.90				0.92	
157C:	 		 		 		
Freeon, very stony	Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	Poor Depth to saturated zone	 0.00 	saturated zone	0.00	
Freeon	Fair Low content of organic matter Too acid Water erosion	 0.12 0.61 0.90	 Poor Depth to saturated zone 	 0.00 	saturated zone	 0.00 0.00 0.92 0.96	
1607.	 		l I		l		
160A: Oesterle	 Fair Low content of organic matter Too acid Droughty	 0.12 0.68 0.91 	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.32 	
182B: Padus	 Fair Low content of organic matter Too acid 	 0.12 0.54	 Good 	 	 Fair Hard to reclaim (rock fragments) Rock fragments Too acid	 0.68 0.98 0.98	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182C: Padus	 Fair Low content of organic matter Too acid 	 0.12 0.54	 Good 	 	 Fair Slope Hard to reclaim (rock fragments) Rock fragments Too acid	 0.63 0.68 0.98
192A: Worcester	 Fair Low content of organic matter Too acid Droughty	 0.12 0.54 0.96	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.68
193A: Minocqua	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.99	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Rock fragments Hard to reclaim (rock fragments)	 0.00 0.12 0.68
215B: Pence	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.12 0.26 0.54	 Good 	 	 Poor Too sandy Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.32
215C: Pence	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.12 0.26 0.54	 Good 	 	Poor Too sandy Rock fragments Hard to reclaim (rock fragments) Slope	 0.00 0.00 0.32 0.63
215D: Pence	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.12 0.26 0.54	 Fair Slope 	 0.08 	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.32
315A: Rib	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.88 0.90	 Poor Depth to saturated zone 	 0.00 	saturated zone	 0.00 0.68
337A: Plover	 Fair Low content of organic matter Too acid	0.12	 Poor Depth to saturated zone 	 0.00 	 Poor Depth to saturated zone 	 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features		limiting features	
368B:	l I		 		 	
Mahtomedi	Poor	i	Good	i	Poor	i
	Too sandy	0.00	İ	i	Too sandy	0.00
	Wind erosion	0.00		İ	Rock fragments	0.00
	Droughty	0.00			Hard to reclaim	0.92
	Low content of	0.12			(rock fragments)	
	organic matter					
	Too acid	0.84				
Cress	Pair		 Good		 Fair	
Cless	Low content of	0.12	9000	I I	Rock fragments	0.02
	organic matter	0.12	 	İ	Too sandy	0.22
	Too sandy	0.22	! 	i	<u>-</u>	0.32
	Droughty	0.40		i	(rock fragments)	
	Too acid	0.54		i	Too acid	0.98
368C:						
Mahtomedi			Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion Droughty	0.00	l I		Rock fragments Hard to reclaim	0.00
	Low content of	0.00	 	I	(rock fragments)	
	organic matter	0.12	 		Slope	0.96
	Too acid	0.84	 	i		
	İ	i		i		i
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22			Hard to reclaim	0.32
	Droughty Too acid	0.40 0.54	 -		(rock fragments)	0.96
	100 acid	0.54	 	i	Slope Too acid	0.98
	i	i		i		
368D:						
Mahtomedi			Fair		Poor	
	Too sandy	0.00	Slope	0.50	-	0.00
	Wind erosion	0.00			Slope	0.00
	Droughty Low content of	0.00	l I		Rock fragments Hard to reclaim	0.00
	organic matter	0.12	 		(rock fragments)	
	Too acid	0.84	 	1	(10ck llagments)	
		i	İ	i		i
Cress	Fair	İ	Fair	İ	Poor	
	Low content of	0.12	Slope	0.50	Slope	0.00
	organic matter	!			Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty	0.40	 		Hard to reclaim	0.32
	Too acid	0.54	 		(rock fragments) Too acid	0.98
		i	 	1	100 aciu	
371A:	i	i		i		İ
Croswell	Poor		Fair		Poor	
	Too sandy	0.00	Depth to	0.53	Too sandy	0.00
	Wind erosion	0.00	saturated zone		Depth to	0.53
	Low content of	0.12		!	saturated zone	
	organic matter			1	Rock fragments	0.97
	Droughty Too acid	0.33				
				1		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil 	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
380B:			 		 	
Cress	!		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22				0.32
	Droughty Too acid	0.40 0.54	 		(rock fragments) Too acid	0.98
Rosholt	Fair		 Good		 Fair	
RODIIO10	Low content of	0.12			Rock fragments	0.12
	organic matter					0.50
	Droughty	0.67		i	(rock fragments)	!
	Too acid	0.68		į		į
380C:			 		 	
Cress	Fair	j	Good	i	Fair	į
	Low content of	0.12		İ	Rock fragments	0.02
	organic matter				Too sandy	0.22
	Too sandy	0.22			Hard to reclaim	0.32
	Droughty	0.40			(rock fragments)	
	Too acid	0.54			Slope	0.96
			 		Too acid 	0.98
Rosholt	Fair	İ	Good	i	Fair	į
	Low content of	0.12			Rock fragments	0.12
	organic matter				Hard to reclaim	0.50
	Droughty	0.67			(rock fragments)	
	Too acid	0.68	l		Slope	0.96
380D:						
Cress	Fair	1	Fair		Poor	
	Low content of	0.12	Slope	0.32		0.00
	organic matter				Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty Too acid	0.40 0.54	 		Hard to reclaim (rock fragments)	0.32
					Too acid	0.98
Rosholt	Fair		 Fair		 Poor	
ROSHOIC	Low content of	0.12	Slope	0.32	!	0.00
	organic matter				Rock fragments	0.12
	Droughty	0.67		i	Hard to reclaim	0.50
	Too acid	0.68	į	į	(rock fragments)	į
383B:			 		 	
Mahtomedi	Poor	İ	Good	İ	Poor	İ
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.00			Hard to reclaim	0.92
	Low content of	0.12			(rock fragments)	
	organic matter Too acid	0.84	l I		l I	
	100 actu				 	
383C: Mahtomedi	Poor		 Good		 Poor	
rancomedi	Too sandy	0.00	G00a 		Poor Too sandy	0.00
	Wind erosion	0.00	 		· -	0.00
	"TITG CLOBIOII	1	1 1			0.92
	Droughty	10.00				
	Droughty Low content of	0.00	 		Hard to reclaim (rock fragments)	1
		1	 	 	!	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
383D:			 			
Mahtomedi	Poor	İ	Fair	į	Poor	į
	Too sandy	0.00	Slope	0.32	Too sandy	0.00
	Wind erosion	0.00			Slope	0.00
	Droughty	0.00				0.00
	Low content of	0.12		ļ	!	0.92
	organic matter Too acid	0.84	 -		(rock fragments)	
	100 acid		 		 	
396B:	į	į		į		į
Friendship			Good	ļ	Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			1	
	Droughty Low content of	0.10	 		 	
	organic matter	0.12	 		 	
	Too acid	0.68				
Wurtsmith	 Page 1		 Fair		l Danasa	1
wurtsmith	Too sandy	0.00	Depth to	0.53	Poor Too sandy	0.00
	Wind erosion	0.00	saturated zone	0.33	Depth to	0.53
	Low content of	0.12		i	saturated zone	
	organic matter	i		i	Too acid	0.76
	Droughty	0.13	İ	į	Rock fragments	0.97
	Too acid	0.50				
Grayling	Poor		 Good		 Poor	
	Too sandy	0.00	İ	į	Too sandy	0.00
	Wind erosion	0.00				
	Droughty	0.00				
	Low content of	0.12				
	organic matter Too acid	0.50	 		l	
397A:						
Perchlake	!	1	Poor		Poor	
	Too sandy Wind erosion	0.00	Depth to saturated zone	0.00	Too sandy Depth to	0.00
	Low content of	0.12	saturated zone		saturated zone	10.00
	organic matter		! 	i		ì
	Too acid	0.68		i		ì
	Droughty	0.75		į		į
399B:	 		 		 	l I
Grayling	Poor	i	 Good	i	Poor	i
	Too sandy	0.00	İ	İ	Too sandy	0.00
	Wind erosion	0.00	İ	ĺ		Ì
	Droughty	0.00				
	Low content of	0.12				!
	organic matter Too acid	0.50	 		 	
						İ
399C:	 Deem		Cood		 Doom	
Grayling	Too sandy	0.00	Good	1	Poor Too sandy	0.00
	Too sandy Wind erosion	0.00	 		Slope	0.96
	Droughty	0.00	! 	i		
	Low content of	0.12		i		i
	organic matter	i ·	İ	i		i
	Too acid	0.50				
	I			1	1	I

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
399D: Grayling	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 	 Fair Slope 	 0.32 	 Poor Too sandy Slope 	 0.00 0.00
405A: Lupton	 Good 		 Poor Depth to saturated zone 	 0.00 	 Poor Depth to saturated zone Content of organic matter	 0.00 0.00
Cathro	 Fair Too acid 	 0.99 	 Poor Depth to saturated zone 	 0.00 	Poor	 0.00 0.00
Tawas	 Good 		 Poor Depth to saturated zone	 0.00 	Poor Depth to saturated zone Content of organic matter	 0.00 0.00
406A: Loxley	 Fair Too acid 	 0.50 	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Content of organic matter Too acid	 0.00 0.00 0.12
407A: Seelyeville	 Fair Too acid 	0.88	 Poor Depth to saturated zone 	 0.00 	 Poor Depth to saturated zone Content of organic matter	0.00
Markey	 Good 		 Poor Depth to saturated zone 	 0.00 	 Poor Depth to saturated zone Content of organic matter	 0.00 0.00
410A: Seelyeville	 Fair Too acid 	0.88	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Content of organic matter	 0.00 0.00
Cathro	 Fair Too acid 	 0.99 	 Poor Depth to saturated zone 	 0.00 		 0.00 0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
412A:			 		 	
Rifle	Good	İ	Poor	İ	Poor	İ
			Depth to	0.00	Depth to	0.00
	[saturated zone		saturated zone	
					Content of	0.00
	 		 		organic matter	
Tacoosh	Good	i	Poor	i	Poor	i
	İ	i	Depth to	0.00	Depth to	0.00
	İ	į	saturated zone	į	saturated zone	į
					Content of	0.00
		!		ļ	organic matter	ļ
415A:	 		 	l	 	
Greenwood	Fair	i	Poor	i	Poor	i
	Too acid	0.50	Depth to	0.00	Depth to	0.00
			saturated zone		saturated zone	
	!	!			Content of	0.00
					organic matter	
	 		 		Too acid	0.12
439B:		i		i	! 	i
Graycalm	Poor	İ	Good	į	Poor	İ
	Too sandy	0.00			Too sandy	0.00
	Wind erosion	0.00			Too acid	0.99
	Low content of	0.12		ļ		ļ
	organic matter					
	Too acid Droughty	0.50 0.75	1		 	
	Dioughty	0.75	 	i	 	i
Menahga	Poor	i	Good	i	Poor	i
	Wind erosion	0.00	İ	ĺ	Too sandy	0.00
	Too sandy	0.00			Too acid	0.88
	Low content of	0.12		ļ		ļ
	organic matter Too acid					
	Droughty	0.50 0.61	 		 	
				i		i
439C:	[[!	1
Graycalm			Good	ļ	Poor	
	Too sandy	0.00			Too sandy	0.00
	Wind erosion Low content of	0.00	 		Slope Too acid	0.96
	organic matter	0.12	 		100 acid	0.99
	Too acid	0.50		i	 	i
	Droughty	0.75	j	į	İ	i
	[ļ		
Menahga	'		Good		Poor	
	Wind erosion Too sandy	0.00	 		Too sandy Too acid	0.00
	Low content of	0.12	 		Too acid Slope	0.88
	organic matter		! 	i		
	Too acid	0.50	İ	i		i
	Droughty	0.61	İ	İ	İ	į
	1		1	1		1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	Potential as source of topsoil	
	Rating class and limiting features	Value	 Rating class and limiting features	Value	 Rating class and limiting features	Value	
439D:	 				 		
Graycalm	Poor	İ	Fair	İ	Poor	İ	
	Too sandy	0.00	Slope	0.32	Too sandy	0.00	
	Wind erosion	0.00			Slope	0.00	
	Low content of	0.12			Too acid	0.99	
	organic matter						
	Too acid	0.50					
	Droughty	0.75	 -				
Menahga	Poor		 Fair		Poor		
	Wind erosion	0.00	Slope	0.32		0.00	
	Too sandy	0.00			Too sandy	0.00	
	Low content of	0.12		i	Too acid	0.88	
	organic matter	İ	İ	İ	İ	İ	
	Too acid	0.50		İ		ĺ	
	Droughty	0.61	[[1	
4410.			 -				
441C: Freeon	Fair		Poor		Poor		
1100011	Low content of	0.12	!	0.00	•	0.00	
	organic matter		saturated zone		saturated zone	i	
	Too acid	0.61		i	Rock fragments	0.00	
	Water erosion	0.90	İ	İ	Slope	0.63	
		İ		İ	Hard to reclaim	0.92	
			 		(rock fragments)		
Cathro	 Not rated		 Poor		 Not rated		
		İ	Depth to	0.00		ĺ	
			saturated zone		!		
442C:			l		 		
Haugen	Fair		 Fair		Poor		
	Low content of	0.12	!	0.53	Hard to reclaim	0.00	
	organic matter		saturated zone		(dense layer)	i	
	Too acid	0.54		İ	Rock fragments	0.00	
		İ		İ	Depth to	0.53	
					saturated zone		
					Hard to reclaim	0.92	
					(rock fragments)		
			 -		Too acid	0.98	
Greenwood	Fair		 Poor		Poor		
GI COMWOOD	Too acid	0.50	Depth to	0.00	Depth to	0.00	
			saturated zone		saturated zone		
		i	!	i	Content of	0.00	
		İ		İ	organic matter	i	
			[Too acid	0.12	
4420.			 				
443D: Amery	 Fair		 Poor		 Poor		
-	Low content of	0.12	Slope	0.00	1	0.00	
	organic matter	İ	_	İ	Rock fragments	0.00	
			I		Hard to reclaim	0.03	
	Too acid	0.54					
	Too acid	0.54 		İ	(dense layer)	j	
	Too acid	0.54		į Į	dense layer) Hard to reclaim	0.92	
	Too acid	0.54 	 - -	 	(dense layer)	0.92	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
443D: Greenwood	 Fair Too acid 	 0.50 	 Poor Depth to saturated zone 	 0.00 	Poor	0.00
461A: Bowstring	 Good 	 	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Content of organic matter	0.00
484A:	<u> </u>	į	į Į	į		į
Greenwood	Fair Too acid 	 0.50 	Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Content of organic matter Too acid	 0.00 0.00 0.12
Beseman	 Fair Too acid Water erosion 	 0.61 0.90 	 Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Content of organic matter Too acid	0.00
495B:	 		 			
Karlsborg	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.68	saturated zone	 0.14 0.95 	Depth to	0.00
Grettum	Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.61 0.98	Good 	 	Poor Too sandy Too acid	0.00
Perida	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.61	 Fair Shrink-swell 	 0.99 	 Too sandy Too acid 	0.00
495C:			 		 	
Karlsborg	Poor Too sandy Wind erosion Low content of organic matter Too acid	 0.00 0.00 0.12 0.68	: -	 0.14 0.95 	Depth to	0.00

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u>i</u>	limiting features	<u>i</u>
495C:	 		l I		 	
Grettum	Poor		 Good		Poor	İ
	Wind erosion	0.00		İ	Too sandy	0.00
	Too sandy	0.00		į	Slope	0.96
	Low content of	0.12		į	Too acid	0.99
	organic matter	į	İ	į		İ
	Too acid	0.61				
	Droughty	0.98	 		 	
Perida	Poor		 Fair		 Poor	
	Too sandy	0.00	Shrink-swell	0.99	Too sandy	0.00
	Wind erosion	0.00			Slope	0.96
	Low content of	0.12			Too acid	0.99
	organic matter					
	Too acid	0.61	 		 	
495D:						i
Karlsborg			Fair		Poor	
	Too sandy	0.00	: -	0.14		0.00
	Wind erosion	0.00	!		Slope	0.00
	Low content of	0.12		0.32		0.14
	organic matter Too acid	0.68	Shrink-swell	0.95	saturated zone	
	Too acid	0.68				
Grettum	!	!	Fair		Poor	į
	Wind erosion	0.00	Slope	0.32		0.00
	Too sandy	0.00			Slope	0.00
	Low content of	0.12	İ		Too acid	0.99
	organic matter Too acid	0.61	 	1	 	1
	Droughty	0.98				
Dani da	 Page					
Perida	!	!	Fair	0.32	Poor	0.00
	Too sandy Wind erosion	0.00	<u>-</u>	0.99	-	0.00
	Low content of	0.12	1	0.55	Too acid	0.99
	organic matter		 	İ	100 4014	
	Too acid	0.61		ļ		
497A:			 		 	
Meenon	Poor	i	Poor	İ	Poor	i
	Too sandy	0.00	'	0.00	'	0.00
	Wind erosion	0.00	saturated zone	İ	Depth to	0.00
	Low content of	0.12			saturated zone	
	organic matter				Rock fragments	0.97
	Too acid	0.80				
	Droughty	0.97	 		 	
515A:						
Manitowish	!	!	Fair	:	Poor	
	Too sandy	0.00	Depth to	0.89	· -	0.00
	Low content of	0.12	saturated zone		Rock fragments	0.00
	organic matter				Hard to reclaim	0.68
	Droughty	0.37	 		(rock fragments)	1
	Too acid	0.54	 	1	Depth to saturated zone	0.89
	1	1	I .	1	salurated zone	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as sour	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
521A: Dody		 0.00 0.12 0.68	 Poor	 0.00 0.00 0.89	 Poor	 0.00 0.00
524E: Rock outcrop	 Not rated	 	 Not rated	 	 Not rated	
Frogcreek	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99 	 Poor Depth to saturated zone 	 0.00 	(dense layer) Depth to saturated zone Rock fragments	 0.00 0.00 0.88 0.92
Metonga	Fair Low content of organic matter Too acid Depth to bedrock Droughty Water erosion	0.12 0.50	 Poor Depth to bedrock Slope 	!	 Poor Slope Depth to bedrock Too acid 	 0.00 0.58 0.76
542B: Haugen, very stony	 Fair Low content of organic matter Too acid 	 0.12 0.54 	 Fair Depth to saturated zone 	 0.53 	(dense layer) Rock fragments Depth to saturated zone	 0.00 0.00 0.53 0.92
Haugen	Fair Low content of organic matter Too acid 	 0.12 0.54 	 Fair Depth to saturated zone 	 0.53 	Poor Hard to reclaim (dense layer) Rock fragments Depth to saturated zone Hard to reclaim (rock fragments) Too acid	 0.00 0.00 0.53 0.92
542C: Haugen, very stony	 Fair Low content of organic matter Too acid 	 0.12 0.54 	 Fair Depth to saturated zone 	 0.53 	Poor Hard to reclaim (dense layer) Rock fragments Depth to saturated zone Hard to reclaim (rock fragments) Slope Too acid	 0.00 0.00 0.53 0.92 0.96 0.98

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as sou of roadfill	Potential as source of roadfill		Potential as source of topsoil	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
542C:							
Haugen	Fair Low content of organic matter Too acid	 0.12 0.54	Fair Depth to saturated zone 	 0.53 	Poor Hard to reclaim (dense layer) Rock fragments Depth to	 0.00 0.00 0.53	
					saturated zone Hard to reclaim (rock fragments)	0.92	
	 	 	 	 	Slope Too acid 	0.98	
543B: Anigon	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	 Good 	 	 Fair Hard to reclaim (rock fragments) 	 0.68 	
543C2:					i I	i 	
Anigon	Low content of organic matter	 0.12 0.68	Good 	 	Fair Hard to reclaim (rock fragments) Slope	 0.68 0.96	
544F:	Water erosion 	0.90	 		 	 	
Menahga	Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty	 0.00 0.00 0.12 0.50 0.60	Poor Slope 	 0.00 	 Poor Slope Too sandy Too acid	0.00	
Mahtomedi	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.00 0.12 	Poor Slope 	 0.00 	 Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.92	
555A: Fordum	 Fair Low content of organic matter Water erosion	 0.88 0.99	 Poor Depth to saturated zone	 0.00	 Poor Depth to saturated zone Rock fragments	 0.00 0.88	
574B: Sayner	 		 Good	 	ROCK Fragments	 0.00	
	Wind erosion Droughty Low content of organic matter	0.00 0.01 0.12	 	 	Rock fragments Hard to reclaim (rock fragments)	0.00	
	Too acid	0.54	 		 		

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
574C:	 		 	 		
Sayner	Poor	İ	Good	İ	Poor	İ
	Too sandy	0.00		ĺ	Too sandy	0.00
	Wind erosion	0.00			Rock fragments	0.00
	Droughty	0.01			Hard to reclaim	0.50
	Low content of	0.12			(rock fragments)	
	organic matter				Slope	0.63
	Too acid	0.54				
574E:	 		 		 	
Sayner	Poor	i	Poor		Poor	
_	Too sandy	0.00	Slope	0.00	Slope	0.00
	Wind erosion	0.00		ĺ	Too sandy	0.00
	Droughty	0.01		ĺ	Rock fragments	0.00
	Low content of	0.12			Hard to reclaim	0.50
	organic matter				(rock fragments)	
	Too acid	0.54	!		!	
579B:	İ		 	l I	1	
Parkfalls	Fair	i	Poor		Poor	
	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter	i	saturated zone	İ	(dense layer)	i
	Droughty	0.39	İ	İ	Depth to	0.00
	Too acid	0.68	İ	İ	saturated zone	İ
	!		!		Rock fragments	0.88
600A:				l i		
Haplosaprists	Not rated		 Not rated	l I	 Not rated	l I
napiosapiiscs		i	NOC Tated	 	Not lated	
Psammaquents	Not rated	į i	Not rated	į į	Not rated	į į
615B:	İ			İ		
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter					0.22
	Too sandy	0.22		ļ	!	0.32
	Droughty	0.40			(rock fragments)	
	Too acid	0.54	 	l I	Too acid	0.98
615C:						
Cress	Fair		Good		Fair	
	Low content of	0.12			Rock fragments	0.02
	organic matter					0.22
	Too sandy	0.22			Hard to reclaim	0.32
		0 40			(rock fragments)	
	Droughty	0.40	!			
	Droughty Too acid	0.40		į		0.96
			 		Slope Too acid	0.96
615D:			 	 		
615D: Cress	Too acid		 Fair	 		
	Too acid		•	 0.32	Too acid	
	Too acid Fair	0.54		 0.32	Too acid Poor Slope	0.98
	Too acid Fair Low content of	0.54		 0.32	Too acid Poor Slope Rock fragments	0.98
	Too acid Fair Low content of organic matter	0.54		 0.32	Too acid Poor Slope Rock fragments Too sandy	0.98
	Too acid	0.54		 0.32 	Too acid Poor Slope Rock fragments Too sandy	0.98 0.00 0.02 0.22 0.32

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as source of reclamation material		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
623A: Capitola	 Fair Low content of		 Poor Depth to		 Poor Depth to	
	organic matter Too acid Water erosion Droughty	 0.88 0.90 0.99	saturated zone	 	saturated zone Hard to reclaim (dense layer) Rock fragments	 0.03 0.97
624A:	 		 		 	
Ossmer	Fair Low content of organic matter Too acid	 0.12 0.68	 Depth to saturated zone	0.00	Poor Depth to saturated zone Hard to reclaim	 0.00 0.68
	Water erosion	0.99	 	İ	rock fragments)	İ I
632A: Aftad	Fair Too acid Low content of organic matter Water erosion	 0.68 0.88 	 Fair Depth to saturated zone	0.53	 Fair Depth to saturated zone	 0.53
	water erosion					
632B: Aftad	Fair Too acid Low content of organic matter Water erosion	 0.68 0.88 0.90	: -	0.53	 Fair Depth to saturated zone 	 0.53
632C: Aftad	!	1	 Fair		 Fair	
	Too acid Low content of organic matter Water erosion	0.68 0.88 0.90	Depth to saturated zone 	0.53	Depth to saturated zone Slope 	0.53 0.96
633F:						
Pence	Poor Too sandy Low content of organic matter Droughty Too acid	 0.00 0.12 0.26 0.54	Poor Slope 	 0.00 	Poor Slope Too sandy Rock fragments Hard to reclaim (rock fragments)	 0.00 0.00 0.00 0.32
Padus	Fair Low content of organic matter Too acid	 0.12 0.54 	 Poor Slope 	0.00	:	 0.00 0.68 0.98 0.98
648B:	[[
Sconsin	Fair Too acid Low content of organic matter Water erosion	 0.68 0.88 	Fair Depth to saturated zone 	 0.14 	Poor Hard to reclaim (dense layer) Depth to saturated zone	 0.00 0.14

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	1	limiting features	1	limiting features	<u> </u>
670C:	 		 	l I	 	
Keweenaw	Fair		 Good	i	 Fair	ì
110110011011	Low content of	0.12		i	Slope	0.63
	organic matter		 	i	Rock fragments	0.88
	Too acid	0.68		İ		i
	İ	į	İ	į		İ
Pence	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of	0.12			Rock fragments	0.00
	organic matter				Hard to reclaim	0.32
	Droughty	0.26			(rock fragments)	
	Too acid	0.54		ļ	Slope	0.63
						1
670E:			 Dane		 Danne	
Keweenaw			Poor		Poor	10.00
	Low content of organic matter	0.12	Slope	0.00	Slope	0.00
	Too acid	0.68	 	i i	Rock fragments	1
			 	i		i
Pence	Poor	i	Poor	i	Poor	i
	Too sandy	0.00	Slope	0.00	Slope	0.00
	Low content of	0.12	. <u>.</u>	i	Too sandy	0.00
	organic matter	i		İ	Rock fragments	0.00
	Droughty	0.26	İ	İ	Hard to reclaim	0.32
	Too acid	0.54			(rock fragments)	
671B:	!					!
Spoonerhill, stony		1	Fair		Poor	
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter Too acid	0.68	 		Too sandy Depth to	0.00
	Droughty	0.96	 		saturated zone	0.55
	Droughty	10.30	 		Hard to reclaim	0.98
			 	i	(rock fragments)	
	İ	i		i	(=====,	i
Spoonerhill	Poor	İ	Fair	İ	Poor	İ
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter				Too sandy	0.00
	Too acid	0.68			Depth to	0.53
	Droughty	0.96			saturated zone	!
				ļ	!	0.98
					(rock fragments)	-
600B.	 		 -		 	1
680B: Stanberry, stony	 Fair	I	 Fair	I I	 Poor	
Standerry, Stony	Too acid	0.54	!	0.53	!	0.00
	Droughty	0.94	saturated zone	0.33	(dense layer)	
	Dioughey		Butaratea zone	i	Depth to	0.53
	i	i	İ	İ	saturated zone	
	į	į		İ	Too acid	0.98
Pence, stony	Poor		Good		Poor	
	Too sandy	0.00			Too sandy	0.00
	Low content of	0.12			Rock fragments	0.00
			·	1		
	organic matter	!	!	!	Hard to reclaim	0.32
	organic matter Droughty Too acid	0.26	 		Hard to reclaim (rock fragments)	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as sour	ce
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
683A: Tipler	 Fair Low content of organic matter Too acid Droughty	 0.12 0.54 0.97	 Fair Depth to saturated zone 	 0.89 	 Fair Rock fragments Hard to reclaim (rock fragments) Depth to saturated zone Too acid	 0.12 0.68 0.89
	İ	į	İ	į	j	İ
706A: Winterfield	Too sandy Low content of organic matter Droughty	0.00 0.12 0.80	 Poor Depth to saturated zone 	 0.00 	Poor Too sandy Depth to saturated zone Rock fragments	 0.00 0.00 0.88
	Water erosion	0.99	l		 	
Totagatic	Poor Too sandy Low content of organic matter Too acid Droughty	 0.00 0.12 0.68 0.98	Poor Depth to saturated zone 	 0.00 	Poor Too sandy Depth to saturated zone	0.00
724A:			 		 	
Rib	Fair Low content of organic matter Too acid Water erosion	 0.12 0.88 0.90	Poor Depth to saturated zone 	0.00	Poor Depth to saturated zone Hard to reclaim (rock fragments)	 0.00 0.68
Rock outcrop	 Not rated		 Not rated		 Not rated	
726B: Sissabagama	Poor Wind erosion Too sandy Low content of organic matter Too acid	 0.00 0.00 0.12 0.68	 Fair Depth to saturated zone 	 0.89 	 Poor Too sandy Depth to saturated zone 	 0.00 0.89
733A:	 		 		 	
Wozny	Fair Low content of organic matter Too acid Water erosion	 0.88 0.88 0.90 	Poor Depth to saturated zone 	 0.00 	Poor Depth to saturated zone Hard to reclaim (rock fragments) Rock fragments Hard to reclaim (dense layer)	 0.00 0.92 0.97 0.97
771A: Lenroot	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.11 0.12 0.84	 Fair Depth to saturated zone 	 0.53 	Poor Too sandy Rock fragments Depth to saturated zone Hard to reclaim (rock fragments)	 0.00 0.00 0.53 0.92

Table 20b.--Construction Materials--Continued

Map symbol and soil name	 Potential as sourc reclamation mater		 Potential as sou of roadfill	rce	 Potential as sour of topsoil	Potential as source of topsoil	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
827A: Scoba	 Fair Low content of organic matter Too acid Droughty	 0.12 0.68 0.74	 Fair Depth to saturated zone 	 0.53 	(rock fragments) Depth to saturated zone		
853C: Frogcreek	Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99 	 Poor Depth to saturated zone 	 0.00 	(dense layer) Depth to saturated zone Rock fragments	 0.00 0.00 0.88 0.92	
Stinnett	Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99	Poor Depth to saturated zone 	 0.00 	Poor Hard to reclaim (dense layer) Depth to saturated zone Too acid	 0.00 0.00 0.98	
Wozny	 Fair Low content of organic matter Too acid Water erosion	 0.88 0.88 0.90 	 Poor Depth to saturated zone 	 0.00 	saturated zone Hard to reclaim (rock fragments)	 0.00 0.92 0.97 0.97	
856B: Stinnett	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99	 Poor Depth to saturated zone 	 0.00 	Poor Hard to reclaim (dense layer) Depth to saturated zone Too acid	 0.00 0.00 0.98	
857B: Frogcreek	 Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99 	 Poor Depth to saturated zone 	 0.00 	Poor	 0.00 0.00 0.88 0.92	

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
857C:	 		 		 	l I
Frogcreek	Fair	i	Poor	i	Poor	i
5	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter	j	saturated zone	į	(dense layer)	İ
	Too acid	0.54			Depth to	0.00
	Water erosion	0.99			saturated zone	
					Slope	0.84
					Rock fragments	0.88
					!	0.92
	l I		 		(rock fragments)	l I
873B:	 		 		 	
Stanberry	Fair	j	Fair	į	Poor	İ
	Too acid	0.54	Depth to	0.53	Hard to reclaim	0.00
	Droughty	0.94	saturated zone		(dense layer)	
					Depth to	0.53
		ļ			saturated zone	
					Too acid	0.98
873C:	 		l I		 	
Stanberry	 Fair		 Fair		Poor	
Standerry	Too acid	0.54	Depth to	0.53	!	0.00
	Droughty	0.94	saturated zone		(dense layer)	
		i		i	Depth to	0.53
		İ		İ	saturated zone	ĺ
					Slope	0.63
					Too acid	0.98
873D:	l I		 		 	l I
Stanberry	 Fair		 Fair		Poor	
Standerry	Too acid	0.54	'	0.08	•	0.00
	Droughty	0.94	Depth to	0.53	Hard to reclaim	0.00
	İ	İ	saturated zone	İ	(dense layer)	İ
					Depth to	0.53
					saturated zone	
					Too acid	0.98
905A:	 		 		 	l
Cublake	Poor		 Fair		 Fair	i
	Wind erosion	0.00	!	0.89	Too sandy	0.30
	Low content of	0.12	saturated zone	i	Too acid	0.76
	organic matter	İ		İ	Depth to	0.89
	Too acid	0.20			saturated zone	
	Too sandy	0.30			Rock fragments	0.97
	Droughty	0.99				
926A:	 		 		 	
Flink	Poor		Poor	i	Poor	
	Too sandy	0.00	!	0.00	•	0.00
	Wind erosion	0.00				0.00
	Low content of	0.12			saturated zone	
	organic matter				Too acid	0.76
	Too acid	0.20				

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	rce	Potential as source of topsoil	
	Rating class and	Value		Value	Rating class and	Value
	limiting features	1	limiting features	<u> </u> 	limiting features	<u> </u>
943D:		i		i		i
Stanberry	Fair	į	Fair	į	Poor	İ
	Too acid	0.54	Depth to	0.53	Hard to reclaim	0.00
	Droughty	0.94	saturated zone		(dense layer)	
			Slope	0.82		0.00
		!				0.53
				ļ	saturated zone	
					Too acid	0.98
C	Not weter		 Dane		 Dane	
Greenwood	NOT rated		Poor Depth to	0.00	Poor Depth to	0.00
		1	saturated zone	10.00	saturated zone	10.00
			Buturuteu zone	i	Content of	0.00
		i	! 	i	organic matter	
		i		i	Too acid	0.12
		i		i		i
948A:						
Billyboy	Fair		Fair		Fair	
	Low content of	0.12	: -	0.14	: -	0.14
	organic matter		saturated zone	ļ	saturated zone	
	Too acid	0.68			!	0.68
	Water erosion	0.99	 		(rock fragments)	
970C:			 		 	1
Keweenaw	Fair	i	Good	i	Fair	i
į	Low content of	0.12		i	Slope	0.63
	organic matter	į	İ	į	Rock fragments	0.88
	Too acid	0.68	[[
_				ļ		
Pence			Good		Poor	
	Too sandy Low content of	0.00	 		Too sandy Rock fragments	0.00
	organic matter	0.12	 	i		0.32
	Droughty	0.26	 	i	(rock fragments)	
	Too acid	0.54		i	Slope	0.63
	İ	İ	İ	į	i -	İ
Greenwood	Not rated		Poor		Not rated	
			Depth to	0.00		
			saturated zone			1
970E:			 		 	1
Keweenaw	 Fair	i	Poor	i	Poor	ì
110110011011	Low content of	0.12	Slope	0.00	Slope	0.00
	organic matter	i		1	Rock fragments	0.88
	Too acid	0.68		į	j	į
Pence			Poor		Poor	
	Too sandy	0.00	Slope	0.00	:	0.00
	Low content of	0.12	 -	1	· -	0.00
	organic matter	0.26	 			0.00
	Droughty Too acid	0.26 0.54	 		Hard to reclaim (rock fragments)	
				i	(100% IIagments)	
Greenwood	Not rated	i	Poor	i	 Not rated	i
	İ	İ	Depth to	0.00		İ
			saturated zone			
		1		1	1	1

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as source of roadfill		Potential as source of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	<u> </u>
1070C:			 -			
Fremstadt	 Fair	l	 Good	1	 Fair	1
riems cade	Too sandy	0.47	6000		Too sandy	0.47
	Too acid	0.68	 		Rock fragments	0.72
	Low content of	0.92		i	Slope	0.84
	organic matter			į		
Cress	 Fair		 Good		 Fair	
	Low content of	0.12		i	Rock fragments	0.02
	organic matter	i	!	i	Too sandy	0.22
	Too sandy	0.22	!	i	Hard to reclaim	0.32
	Droughty	0.40		i	(rock fragments)	i
	Too acid	0.54	İ	İ	Slope	0.96
		į		į	Too acid	0.98
1070D:	 				 	
Fremstadt	Fair		Fair		Poor	
	Too sandy	0.47	Slope	0.08	Slope	0.00
	Too acid	0.68			Too sandy	0.47
	Low content of	0.92			Rock fragments	0.72
	organic matter		 			
Cress	 Fair		 Fair		Poor	
	Low content of	0.12	Slope	0.32	Slope	0.00
	organic matter				Rock fragments	0.02
	Too sandy	0.22			Too sandy	0.22
	Droughty	0.40			Hard to reclaim	0.32
	Too acid	0.54			(rock fragments)	
	 		 		Too acid	0.98
1080B:				į	į	į
Spoonerhill			Fair	1	Poor	
	Too sandy	0.00	Depth to	0.53	Hard to reclaim	0.00
	Low content of	0.12	saturated zone		(dense layer)	
	organic matter		 		Too sandy	0.00
	Too acid	0.68	İ		Rock fragments	0.03
	Droughty	10.96	 		Depth to saturated zone	0.55
	 		 		Hard to reclaim	0.98
					(rock fragments)	
Spoonerhill, stony	Poor		 Fair		Poor	
	Too sandy	0.00		0.53	!	0.00
	Low content of	0.12	saturated zone		(dense layer)	1
	organic matter	i	!	i	Too sandy	0.00
	Too acid	0.68		i	Depth to	0.53
	Droughty	0.96	İ	İ	saturated zone	İ
		<u> </u>			Hard to reclaim (rock fragments)	0.98
Cress	 Fair		 Good		 Fair	
Cress	Low content of	0.12		İ	Rock fragments	0.02
			ı	1		10 22
	organic matter				Too sandy	0.22
	organic matter	0.22	 		Too sandy Hard to reclaim	0.32
	-	 0.22 0.40	 	 		0.32

Table 20b.--Construction Materials--Continued

Map symbol and soil name	 Potential as sourc reclamation mater 		Potential as sou of roadfill	rce	Potential as sour of topsoil	ce
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1653C: Stanberry	Pair		 Fair		Poor	
Scamerry	Too acid Droughty	0.54 0.94 	Depth to	 0.53 	!	0.00 0.53 0.96 0.98
Parkfalls	 Fair Low content of organic matter Droughty Too acid	 0.12 0.39 0.68	 Poor Depth to saturated zone 	 0.00 	Poor	 0.00 0.00 0.88
Wozny	Fair Low content of organic matter Too acid Water erosion	 0.88 0.88 0.90 	Poor Depth to saturated zone 	 0.00 	saturated zone	 0.00 0.92 0.97 0.97
2015: Pits	 Not rated 		 Not rated 		 Not rated 	
2050: Landfill	 Not rated 		 Not rated 	 	 Not rated 	
3011A: Barronett	Fair Low content of organic matter Too acid Water erosion	 0.12 0.68 0.90	 Poor Depth to saturated zone	 0.00 	 Poor Depth to saturated zone	 0.00
3125A:					 	
Meehan	Poor Too sandy Wind erosion Droughty Low content of organic matter Too acid	 0.00 0.00 0.06 0.12 	-	 0.00 	Poor Too sandy Depth to saturated zone Too acid	 0.00 0.00 0.88
3126A: Wurtsmith	Poor Too sandy Wind erosion Low content of organic matter Droughty Too acid	 0.00 0.00 0.12 0.15 0.50	 Fair Depth to saturated zone 	 0.53 	 Poor Too sandy Depth to saturated zone Too acid Rock fragments	 0.00 0.53 0.76 0.97

Table 20b.--Construction Materials--Continued

Map symbol and soil name	Potential as sourc reclamation mater		Potential as sou of roadfill	ırce	Potential as sour of topsoil	ce
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3276A:	 		 		 	
Au Gres	Poor		Poor		Poor	
	Too sandy	0.00	Depth to	0.00		0.00
	Wind erosion	0.00	saturated zone		Depth to	0.00
	Low content of	0.12			saturated zone	
	organic matter			ļ	Too acid	0.99
	Too acid Droughty	0.50			 	
3312B:	 		 		 	
Glendenning, very						
stony	!	1	Poor	!	Poor	
	Low content of	0.12	Depth to	0.00	Hard to reclaim	0.00
	organic matter		saturated zone		(dense layer)	
	Too acid	0.68			Depth to	0.00
	 		İ		saturated zone	0.12
	 		 	i i	Rock fragments Hard to reclaim	0.12
			 		(rock fragments)	
Glendenning	Pair		 Poor	l I	 Poor	
Grendenning	Low content of	0.12	!	0.00	1	0.00
	organic matter	0.12	saturated zone	10.00	(dense layer)	10.00
	Too acid	0.68	sacuraced zone		Depth to	0.00
	100 4014		 	1	saturated zone	
		i		i	Rock fragments	0.12
		i		i	Hard to reclaim	0.98
		į	 	į	rock fragments)	į
3336A:		İ	 			i
Fenander	Fair	i	Poor	i	Poor	i
	Low content of	0.12	Depth to	0.00	Depth to	0.00
	organic matter	į	saturated zone	i	saturated zone	İ
	Too acid	0.99	 -	İ	 	İ
3403A:						į
Loxley	rair Too acid	0.50	Poor Depth to	0.00	Poor Depth to	0.00
	100 acid	10.50	saturated zone	10.00	saturated zone	10.00
	 		sacuraced zone	İ	Content of	0.00
			 	i	organic matter	
		i			Too acid	0.12
	İ	į	İ	i	İ	İ
Beseman	Fair		Poor		Poor	
	Too acid	0.61	Depth to	0.00	Depth to	0.00
	Water erosion	0.90	saturated zone		saturated zone	
	[[Content of	0.00
				1	organic matter	
			 	1	Too acid	0.12
Dawson	Poor	1	 Poor	1	 Poor	1
Da49011	Too acid	0.00	'	0.00	•	0.00
	Water erosion	0.00	· -		saturated zone	
					Content of	0.00
				1		
	į	i	İ	ĺ	Too acid	0.12
	 - -	 	 	 	organic matter	į

Table 20b.--Construction Materials--Continued

Rating class and limiting features Fair Low content of organic matter Too acid Water erosion Fair Low content of organic matter Too acid Water erosion	 0.12 0.54 0.99 	Rating class and limiting features Poor Depth to saturated zone Poor Depth to Depth to Saturated zone	0.00	Rating class and limiting features	Value 0.00 0.88 0.92
Low content of organic matter Too acid Water erosion Fair Low content of organic matter Too acid	0.54	Depth to saturated zone 	0.00 	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
Low content of organic matter Too acid Water erosion Fair Low content of organic matter Too acid	0.54	Depth to saturated zone 	0.00 	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
Low content of organic matter Too acid Water erosion Fair Low content of organic matter Too acid	0.54	Depth to saturated zone 	0.00 	Hard to reclaim (dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
organic matter Too acid Water erosion Fair Low content of organic matter Too acid	0.54	saturated zone	 	(dense layer) Depth to saturated zone Rock fragments Hard to reclaim	0.00
Too acid Water erosion Fair Low content of organic matter Too acid	0.99	 Poor	!	Depth to saturated zone Rock fragments	0.88
Fair Low content of organic matter Too acid	 0.12 0.68		!	Rock fragments Hard to reclaim	!
Low content of organic matter Too acid	0.68		!	Hard to reclaim	!
Low content of organic matter Too acid	0.68		!	!	0.92
Low content of organic matter Too acid	0.68		!	(rock fragments)	
Low content of organic matter Too acid	0.68		!		
Low content of organic matter Too acid	0.68		!	Poor	I
organic matter Too acid	0.68	F	0.00	!	0.00
Too acid	!	saturated zone		saturated zone	
Water erosion	1.	Depth to bedrock	0.58	Rock fragments	0.50
	0.99	· -	İ	Hard to reclaim	0.54
	İ			(dense layer)	ĺ
	[!	0.92
				(rock fragments)	
 Fair		Poor	l I	Poor	
	1		!	!	0.00
		saturated zone		!	
Too acid	0.54		İ	Depth to	0.00
Water erosion	0.99			saturated zone	İ
			ļ	Too acid	0.98
Not rated	ļ	 Not rated	 	 Not rated	
Poor		Poor	l I	Poor	
	!		!		0.00
Low content of	0.12	saturated zone		Depth to	0.00
organic matter	İ			saturated zone	İ
Too acid	0.50			Rock fragments	0.97
Droughty	0.97				
		 	l I	 	l I
Poor	i	Good	İ	Poor	İ
Wind erosion	0.00			Too sandy	0.00
Too sandy	0.00			Too acid	0.99
Low content of	0.12		ļ		
•		 	l I	 	
Dioughey		 		! 	
	İ	İ	İ	İ	į
Poor	1	Good		Poor	
	1			· -	0.00
· -	1	 			0.96
	U.12	 	I I	100 acid	0.99
Too acid	0.61	! 	İ	 	
Droughty	0.98	İ	İ	İ	į
 Danne				 Danier	
		'		!	
· -	1	-	U.89	· -	0.00
		Datarated Zone	İ	:	0.12
Too acid	0.84		i	saturated zone	
Droughty	0.93		İ	İ	i
	Not rated Poor Too sandy Low content of organic matter Too acid Droughty Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty Poor Wind erosion Too sandy Low content of organic matter Too acid Droughty Poor Too sandy Low content of organic matter Too acid Droughty Poor Too sandy Low content of organic matter Too acid Droughty Poor Too sandy Low content of organic matter Too acid	Low content of organic matter Too acid 0.54 Water erosion 0.99 Not rated	Low content of organic matter saturated zone Too acid 0.54 Water erosion 0.99	Low content of organic matter Too acid 0.54 Water erosion 0.99	Low content of organic matter

Table 20b.--Construction Materials--Continued

Map symbol Potential as source			Potential as source		Potential as source	
and soil name	reclamation mater	ial	of roadfill		of topsoil	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
3629B:	 		 		 	
Perida	Poor	İ	Fair	İ	Poor	İ
	Too sandy	0.00	Shrink-swell	0.99	Too sandy	0.00
	Wind erosion	0.00	ĺ	İ	Too acid	0.99
	Low content of	0.12	ĺ	İ	Ī	ĺ
	organic matter	İ	ĺ	İ	Ī	ĺ
	Too acid	0.61				
M-W:	 		 		 	
Miscellaneous water	Not rated	į	Not rated	į	Not rated	į
W:					 	
Water	Not rated		Not rated		Not rated	

Table 21.--Water Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol and soil name	 Pond reservoir ar 	eas	Embankments, dikes levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	1	Rating class and limiting features	Value
3A: Totagatic	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.81	 Very limited Cutbanks cave 	 1.00
Bowstring	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00	 Very limited Cutbanks cave 	 1.00
Ausable	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.58	 Very limited Cutbanks cave 	 1.00
22A: Comstock	 Somewhat limited Seepage 	 0.72 	Very limited Depth to saturated zone Piping	 1.00 0.96	 Very limited Cutbanks cave Slow refill	 1.00 0.28
24A: Poskin	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Piping Seepage	 1.00 1.00 0.50	 Very limited Cutbanks cave 	 1.00
27A: Scott Lake	 Very limited Seepage 	 1.00	 Somewhat limited Depth to saturated zone Seepage	 0.86 0.50	 Very limited Cutbanks cave Depth to water	 1.00 0.06
28B: Haugen, very stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	1.00
Haugen	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00
Rosholt, very stony	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	0.50	 Very limited No ground water 	 1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	Embankments, dikes, and levees		Aquifer-fed excavated ponds		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
28B: Rosholt			 Somewhat limited Seepage		 Very limited No ground water		
28C: Haugen, very stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00 	
Haugen	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00 	
Rosholt, very stony	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00	
Rosholt	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00	
33B: Chetek	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	 1.00	
33C: Chetek	 Very limited Seepage 	1.00	 Somewhat limited Seepage	0.50	 - Very limited No ground water 	1.00	
38A: Rosholt	 Very limited Seepage 	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water 	 1.00	
38B: Rosholt	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	 1.00	
38C: Rosholt	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	 1.00	
38D: Rosholt	 Very limited Seepage Slope	 1.00 0.04	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	1.00	
42D: Amery	 Somewhat limited Seepage Slope	 0.72 0.04	 Somewhat limited Seepage 	 0.03 	 Very limited No ground water 	 1.00 	
43B: Antigo	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water 	 1.00	
43C: Antigo	 Very limited Seepage Slope	 	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	 1.00	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		 Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
43D: Antigo	 Very limited Seepage Slope	 1.00 0.21	 Somewhat limited Seepage 	 0.50	 Very limited No ground water	
48A: Brill	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.50	 Very limited No ground water 	1.00
63A: Crystal Lake	 Somewhat limited Seepage 	 0.72 	 Very limited Piping Depth to saturated zone	 1.00 0.99 	!	 1.00 0.96 0.24
63B: Crystal Lake	 Somewhat limited Seepage 	 0.72 	 Very limited Piping Depth to saturated zone	 1.00 0.99 	!	 1.00 0.96 0.24
63C: Crystal Lake	 Somewhat limited Seepage 	 0.72 	 Very limited Piping Depth to saturated zone	 1.00 0.99 	!	 1.00 0.96 0.54
63E: Crystal Lake	 Somewhat limited Seepage Slope 	 0.72 0.41 	 Very limited Piping Depth to saturated zone	 1.00 0.86	!	 1.00 0.96 0.96
64A: Totagatic	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.81	 Very limited Cutbanks cave 	1.00
Winterfield	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.64	 Very limited Cutbanks cave 	 1.00
69B:		į	 	į		į
Keweenaw	Very limited Seepage 	1.00	Somewhat limited Seepage	0.11	Very limited No ground water	1.00
Sayner	 Very limited Seepage	1.00	Somewhat limited Seepage	0.72	 Very limited No ground water	1.00
Vilas	 Very limited Seepage 	 1.00	 Somewhat limited Seepage 	 0.86	 Very limited No ground water 	 1.00
69C: Keweenaw	 Very limited Seepage 	 1.00 	 Somewhat limited Seepage 	 0.11 	 Very limited No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas 		Embankments, dikes	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
69C: Sayner	 Very limited Seepage	 1.00	 Somewhat limited Seepage	 0.72	 Very limited No ground water	 1.00
Vilas	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.86	 Very limited No ground water	1.00
69E: Keweenaw	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage	 0.11	 Very limited No ground water	1.00
Sayner	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage 	 0.72 	 Very limited No ground water 	 1.00
Vilas	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage 	 0.86 	 Very limited No ground water 	1.00
74B: Vilas	 Very limited Seepage 	1.00	 Somewhat limited Seepage	 0.86	 Very limited No ground water 	1.00
74C: Vilas	 Very limited Seepage Slope	 1.00 0.01	 Somewhat limited Seepage	 0.86 	 Very limited No ground water 	1.00
74D: Vilas	 Very limited Seepage Slope	 1.00 0.21	 Somewhat limited Seepage	 0.86	 Very limited No ground water	1.00
100B: Menahga	 Very limited Seepage 	 1.00	 Somewhat limited Seepage	 0.64	 Very limited No ground water 	 1.00
100C: Menahga	 Very limited Seepage 	 1.00	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	 1.00
100D: Menahga	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	1.00
127D: Amery	 Somewhat limited Seepage Slope	 0.72 0.04	 Somewhat limited Seepage 	 0.03 	 Very limited No ground water 	 1.00
Rosholt	 Very limited Seepage Slope	 1.00 0.04	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	1.00
127E: Amery	 Somewhat limited Seepage Slope	 0.72 0.64	 Somewhat limited Seepage	0.03	 Very limited No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	 Pond reservoir ar 	eas	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u> </u>	limiting features	<u> </u>
127E: Rosholt	 Very limited Seepage Slope	 1.00 0.64	 Somewhat limited Seepage 	 0.50	 Very limited No ground water 	 1.00
15CD.			l			
156B: Magnor, very stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Piping	 1.00 1.00	 Very limited No ground water 	1.00
	 		Figing Thin layer Seepage	0.37	 	
Magnor	Somewhat limited Seepage - -	 0.72 	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.37 0.04	 Very limited No ground water 	 1.00
157B:	 		 		l	
Freeon, very stony	 Somewhat limited Seepage 	 0.02 	 Very limited Depth to saturated zone Piping Thin layer	 1.00 1.00 0.37	 Very limited No ground water 	1.00
Freeon	 Somewhat limited Seepage 	 0.02 	Seepage 	0.04 1.00 1.00 0.37 0.04	 Very limited No ground water 	1.00
157C: Freeon, very stony	 Somewhat limited Seepage 	 0.02 	 Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.37 0.04	 Very limited No ground water 	1.00
Freeon	 Somewhat limited Seepage 	 0.02 	 Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.37 0.04	 Very limited No ground water 	 1.00
160A: Oesterle	 Very limited Seepage 	 1.00 	Very limited Depth to saturated zone Seepage	 1.00 0.50	 Very limited Cutbanks cave 	 1.00
182B: Padus	 Very limited Seepage 	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		 Embankments, dikes levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
182C: Padus	 Very limited Seepage Slope	 1.00 0.01	 Somewhat limited Seepage	 0.50	 Very limited No ground water	 1.00
192A: Worcester	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.50	 Very limited Cutbanks cave 	 1.00
193A: Minocqua	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.50	 Very limited Cutbanks cave 	1.00
215B: Pence	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	 1.00
215C: Pence	 Very limited Seepage Slope	 1.00 0.01	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	1.00
215D: Pence	 Very limited Seepage Slope	 1.00 0.21	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
315A: Rib	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Piping Ponding Seepage	 1.00 1.00 1.00	 Very limited Cutbanks cave 	 1.00
337A: Plover	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Piping	 1.00 1.00	 Very limited Cutbanks cave Slow refill 	 1.00 0.28
368B: Mahtomedi	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.64	 Very limited No ground water	1.00
Cress	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	 0.50	 Very limited No ground water 	 1.00
368C: Mahtomedi	 Very limited Seepage	1.00	 Somewhat limited Seepage 	0.64	 Very limited No ground water	 1.00
Cress	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	0.50	 Very limited No ground water 	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
368D: Mahtomedi	 Very limited Seepage Slope	 1.00 0.12	 Somewhat limited Seepage 	 0.64	 Very limited No ground water	1.00
Cress	 Very limited Seepage Slope	 1.00 0.12	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	1.00
371A: Croswell	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 0.99 0.86	 Very limited Cutbanks cave Depth to water 	 1.00 0.01
380B: Cress	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00
Rosholt	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00
380C: Cress	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
Rosholt	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00
380D: Cress	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.50	 Very limited No ground water	1.00
Rosholt	 Very limited Seepage Slope 	 1.00 0.15	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	1.00
383B: Mahtomedi	 Very limited Seepage 	1.00	 Somewhat limited Seepage	 0.64	 Very limited No ground water	1.00
383C: Mahtomedi	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.64	 Very limited No ground water	1.00
383D: Mahtomedi	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	1.00
396B: Friendship	 Very limited Seepage 	 1.00 	 Somewhat limited Seepage 	 0.86	 Very limited Cutbanks cave Depth to water	1.00
Wurtsmith	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 0.99 0.82	 Very limited Cutbanks cave Depth to water 	 1.00 0.01

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	Embankments, dikes levees	, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
396B: Grayling	 Very limited Seepage 	 1.00	 Somewhat limited Seepage 	 0.64	 Very limited No ground water 	1.00
397A: Perchlake	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.64	 Very limited Cutbanks cave 	1.00
399B: Grayling	 Very limited Seepage	1.00	 Somewhat limited Seepage 	 0.64	 Very limited No ground water	1.00
399C: Grayling	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	 0.64	 Very limited No ground water 	1.00
399D: Grayling	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage	 0.64 	 Very limited No ground water	1.00
405A: Lupton	 Very limited Seepage	1.00	 Not rated 		 Somewhat limited Cutbanks cave	0.10
Cathro	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.03	 Somewhat limited Cutbanks cave 	 0.10
Tawas	 Very limited Seepage 	 1.00 	Very limited	 1.00 1.00 0.20	 Very limited Cutbanks cave 	 1.00
406A: Loxley	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10
407A: Seelyeville	 Very limited Seepage 	 1.00 	 Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
407A: Markey	 Very limited Seepage 	 1.00 	Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.64	 Very limited Cutbanks cave 	 1.00
410A: Seelyeville	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	0.10
Cathro	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.03	 Somewhat limited Cutbanks cave 	 0.10
412A: Rifle	 Very limited Seepage	1.00	 Not rated 		 Somewhat limited Cutbanks cave	0.10
Tacoosh	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Ponding Seepage	 1.00 1.00 1.00 0.03	 Somewhat limited Cutbanks cave 	 0.10
415A: Greenwood	 Very limited Seepage 	 1.00	 Not rated 	 	 Somewhat limited Cutbanks cave 	 0.10
439B: Graycalm	 Very limited Seepage	 1.00	 Somewhat limited Seepage	 0.64	 Very limited No ground water	 1.00
Menahga	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	0.64	 Very limited No ground water 	1.00
439C: Graycalm	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.64	 Very limited No ground water	1.00
Menahga	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	0.64	 Very limited No ground water 	1.00
439D: Graycalm	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	1.00
Menahga	 Very limited Seepage Slope 	 1.00 0.15	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar	eas	 Embankments, dikes levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
441C: Freeon	 Somewhat limited Seepage Slope 	 0.02 0.01 	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.37 0.04	 Very limited No ground water 	 1.00
Cathro	 Very limited Seepage	1.00	 Not rated 		 Somewhat limited Cutbanks cave	 0.10
442C: Haugen	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00
Greenwood	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10
443D: Amery	 Somewhat limited Seepage Slope	0.72	 Somewhat limited Seepage	0.03	 Very limited No ground water	1.00
Greenwood	 Very limited Seepage 	 1.00 		 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10
461A: Bowstring	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Ponding	 1.00 1.00 1.00	 Very limited Cutbanks cave 	 1.00
484A: Greenwood	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10
Beseman	 Very limited Seepage 	 1.00 		 1.00 1.00 1.00	 Somewhat limited Cutbanks cave 	 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		 Embankments, dikes levees	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
495B: Karlsborg	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.72	 Very limited No ground water	1.00	
Grettum	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	 0.58 	 Very limited Cutbanks cave Depth to water	 1.00 0.96	
Perida	 Very limited Seepage 	 1.00 	 Somewhat limited Seepage Depth to saturated zone	 0.72 0.09 	 Very limited No ground water 	1.00	
495C: Karlsborg	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.72	 Very limited No ground water 	1.00	
Grettum	 Very limited Seepage 	 1.00	 Somewhat limited Seepage 	 0.58 	 Very limited Cutbanks cave Depth to water	 1.00 0.96	
Perida	 Very limited Seepage 	 1.00 	Somewhat limited Seepage Depth to saturated zone	 0.72 0.09 	 Very limited No ground water 	1.00	
495D:	 		 		 	1	
Karlsborg	Very limited Seepage Slope	 1.00 0.15	Very limited Depth to saturated zone Seepage	 1.00 0.72	Very limited No ground water	1.00	
Grettum	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.58 	 Very limited Cutbanks cave Depth to water	 1.00 0.96	
Perida	 Very limited Seepage Slope	 1.00 0.15 	 Somewhat limited Seepage Depth to saturated zone	 0.72 0.09 	 Very limited No ground water	1.00	
497A: Meenon	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.72	 Very limited No ground water 	1.00	
515A: Manitowish	 Very limited Seepage 	 1.00 	 Somewhat limited Depth to saturated zone Seepage	 0.86 0.50	 Very limited Cutbanks cave Depth to water	 1.00 0.06	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar 	eas	Embankments, dikes levees	, and	Aquifer-fed excavated pond	ls
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
521A: Dody	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.13	Very limited No ground water	 1.00
524E: Rock outcrop	 Somewhat limited Slope	0.21	 Not rated 	 	 Not rated 	
Frogcreek	 Somewhat limited Seepage 	 0.04 	Very limited Depth to saturated zone Thin layer Seepage	 1.00 0.11 0.09	 Very limited No ground water 	 1.00
Metonga	 Very limited Seepage Depth to bedrock Slope	1.00	 Very limited Piping Thin layer Seepage	 1.00 0.85 0.04	 Very limited No ground water 	 1.00
542B: Haugen, very stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00
Haugen	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00
542C: Haugen, very stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	1.00
Haugen	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.04	 Very limited No ground water 	 1.00
543B: Anigon	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
543C2: Anigon	 Very limited Seepage	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
544F: Menahga	 Very limited Seepage Slope	 1.00 0.82	 Somewhat limited Seepage	 0.64	 Very limited No ground water 	 1.00
Mahtomedi	 Very limited Seepage Slope	1.00	 Somewhat limited Seepage 	 0.64 	 Very limited No ground water 	1.00

Table 21.--Water Management--Continued

Map symbol and soil name	 Pond reservoir ar 	eas	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
555A: Fordum	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.53	 Very limited Cutbanks cave 	 1.00
574B: Sayner	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.72	 Very limited No ground water	1.00
574C: Sayner	 Very limited Seepage Slope	 1.00 0.01	 Somewhat limited Seepage	 0.72 	 Very limited No ground water	1.00
574E: Sayner	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage	 0.72	 Very limited No ground water	1.00
579B: Parkfalls	 Somewhat limited Seepage 	 0.04 	 Very limited Depth to saturated zone Thin layer Seepage	 	 Very limited No ground water 	
600A: Haplosaprists	 Not limited 	 	 Not rated 	 	 Not rated 	
Psammaquents	Not limited	j I	Not rated	j I	Not rated	İ
615B: Cress	 Very limited Seepage	 1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
615C: Cress	 Very limited Seepage 	1.00	 Somewhat limited Seepage 	 0.50	 Very limited No ground water	1.00
615D: Cress	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
623A: Capitola	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Piping Ponding Thin layer Seepage	 1.00 1.00 1.00 0.86 0.04	 Very limited No ground water 	 1.00
624A: Ossmer	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.50	 Very limited Cutbanks cave 	 1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes	Embankments, dikes, and levees		Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value	
	limiting features		limiting features	<u> </u>	limiting features	1	
632A: Aftad	 Somewhat limited Seepage 	0.72	 Very limited Piping Depth to saturated zone	 1.00 0.99	 Very limited Cutbanks cave Slow refill Depth to water	 1.00 0.28 0.24	
632B: Aftad	 Somewhat limited Seepage 	0.72	 Very limited Piping Depth to saturated zone	 1.00 0.99	 Very limited Cutbanks cave Slow refill Depth to water	 1.00 0.28 0.24	
632C: Aftad	 Somewhat limited Seepage 	 0.72 	 Very limited Piping Depth to saturated zone	 1.00 0.99 	 Very limited Cutbanks cave Slow refill Depth to water	 1.00 0.96 0.54	
633F: Pence	 Very limited Seepage Slope	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00	
Padus	 Very limited Seepage Slope	 1.00 0.82	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	 1.00 	
648B: Sconsin	 Very limited Seepage 	 1.00 	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.88 0.01	 Very limited No ground water 	1.00	
670C: Keweenaw	 Very limited Seepage Slope	1.00	 Somewhat limited Seepage	 0.11	 Very limited No ground water	 1.00	
Pence	 Very limited Seepage Slope 	 1.00 0.01	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	 1.00 	
670E: Keweenaw	 Very limited Seepage Slope	1.00	 Somewhat limited Seepage	 0.11 	 Very limited No ground water 	1.00	
Pence	 Very limited Seepage Slope 	 1.00 0.50	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	 1.00 	
671B: Spoonerhill, stony	 Somewhat limited Seepage 	0.72	Very limited Depth to saturated zone Seepage	 0.99 0.11	 Very limited No ground water 	 1.00 	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir ar 	eas	Embankments, dikes levees	, and	Aquifer-fed excavated pond	ls
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u> </u>	limiting features	<u>i</u>
671B: Spoonerhill	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.11	 Very limited No ground water	 1.00
680B:	 		 	 	 	
Stanberry, stony	Somewhat limited Seepage 	0.04	Very limited Depth to saturated zone Thin layer Seepage	 0.99 0.37 0.07	Very limited No ground water	1.00
Pence, stony	 Very limited Seepage 	1.00	 Somewhat limited Seepage	 0.50	 Very limited No ground water	1.00
683A: Tipler	 Very limited Seepage	1.00	 Somewhat limited Depth to saturated zone Seepage	 0.86 0.50	 Very limited Cutbanks cave Depth to water	1.00
	 		beepage 			
706A: Winterfield	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.64	 Very limited Cutbanks cave 	 1.00
Totagatic	 Very limited Seepage 	 1.00 	 Very limited	 1.00 1.00 0.81	 Very limited Cutbanks cave 	1.00
724A:	 		 		 	
	Very limited Seepage	1.00	Very limited Depth to saturated zone Piping Ponding Seepage	 1.00 1.00 1.00 0.50	Very limited Cutbanks cave	1.00
Rock outcrop	 Not rated 	 	 Not rated 	 	 Not rated 	
726B: Sissabagama	 Very limited Seepage 	1.00	 Somewhat limited Depth to saturated zone Seepage	 0.86 0.36	 Very limited Cutbanks cave Depth to water	 1.00 0.24
733A: Wozny	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Piping Ponding Thin layer Seepage	 1.00 1.00 1.00 0.11 0.09	 Very limited No ground water 	 1.00

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas 		Embankments, dikes levees	, and	Aquifer-fed excavated ponds	
	Rating class and	Value	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>	limiting features	1
771A:	 		 		 	
Lenroot	Very limited	į	Very limited	İ	Very limited	j
	Seepage	1.00	· -	0.99	!	1.00
	 		saturated zone Seepage	0.54	Depth to water	0.01
						i
827A: Scoba	 Very limited		 Very limited		 Very limited	
BCODa	Seepage	1.00		0.99		1.00
			saturated zone		Depth to water	0.01
			Seepage	0.50		1
853C:	 		 		 	
Frogcreek		:	Very limited	İ	Very limited	
	Seepage	0.04	· -	1.00	No ground water	1.00
			saturated zone Thin layer	0.11	 	l
			Seepage	0.09		
Stinnett			 Very limited		 Very limited	
Scimecc	Seepage	0.72		1.00	: -	1.00
		j	saturated zone	į	İ	j
]	Piping	1.00	[
			Thin layer Seepage	0.11	 	
			beepage			
Wozny			Very limited		Very limited	
	Seepage	0.72	Depth to saturated zone	1.00	No ground water	1.00
			Piping	1.00		
	İ	į	Ponding	1.00	į	j
			Thin layer	0.11		
			Seepage 	0.09	 	
856B:	į	į		į	į	į
Stinnett		0.72	Very limited	:	Very limited	1.00
	Seepage	0.72	Depth to saturated zone	1.00	No ground water	1
		i	Piping	1.00		j
			Thin layer	0.11	[
			Seepage	0.09	 	
857B:				İ		i
Frogcreek	:		Very limited		Very limited	
	Seepage	0.04	Depth to saturated zone	1.00	No ground water	1.00
			Thin layer	0.11	 	
	į	į	Seepage	0.09	į	į
857C:			 		 	1
Frogcreek	Somewhat limited	İ	 Very limited	İ	 Very limited	ĺ
	Seepage	0.04	Depth to	1.00	No ground water	1.00
			saturated zone Thin layer	0 11	 	1
			Thin layer Seepage	0.11	 	1
	i	i			İ	í

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes levees	, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
873B: Stanberry	 Somewhat limited Seepage 	 0.04 	 Very limited Depth to saturated zone Thin layer Seepage	 0.99 0.37 0.07	 Very limited No ground water 	 1.00
873C: Stanberry	 Somewhat limited Seepage Slope 	 0.04 0.01 	 Very limited Depth to saturated zone Thin layer Seepage	 0.99 0.37 0.07	 Very limited No ground water 	1.00
873D: Stanberry	 Somewhat limited Slope Seepage 	 0.21 0.04 	 Very limited Depth to saturated zone Thin layer Seepage	 0.99 0.37 0.07	 Very limited No ground water 	1.00
905A: Cublake	 Very limited Seepage 	 1.00 	 Somewhat limited Depth to saturated zone Seepage	 0.86 0.08	 Very limited Cutbanks cave Depth to water	 1.00 0.24
926A: Flink	 Very limited Seepage	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.75	 Very limited No ground water	1.00
943D: Stanberry	 Somewhat limited Slope Seepage 	0.08	 Very limited Depth to saturated zone Thin layer Seepage	0.99	 Very limited No ground water 	 1.00
Greenwood	 Somewhat limited Seepage	0.72	 Not rated 		 Somewhat limited Cutbanks cave	0.10
948A: Billyboy	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.50	 Very limited Cutbanks cave 	 1.00
970C: Keweenaw	 Very limited Seepage Slope	 - 1.00 0.01	 Somewhat limited Seepage	 0.11	 Very limited No ground water	1.00
Pence	 Very limited Seepage Slope	 1.00 0.01	 Somewhat limited Seepage 	 0.50	 Very limited No ground water	 1.00
Greenwood	 Very limited Seepage 	 1.00	 Not rated 	 	 Somewhat limited Cutbanks cave 	 0.10

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dikes levees	, and	Aquifer-fed excavated ponds		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	
970E: Keweenaw	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage 	 0.11	 Very limited No ground water 	 1.00	
Pence	 Very limited Seepage Slope	 1.00 0.50	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water	 1.00	
Greenwood	 Very limited Seepage	1.00	 Not rated 	 	 Somewhat limited Cutbanks cave	0.10	
1070C: Fremstadt	 Very limited Seepage		 Somewhat limited Seepage	 0.07	 Very limited No ground water		
Cress	 Very limited Seepage	1.00	 Somewhat limited Seepage	0.50	 Very limited No ground water	1.00	
1070D: Fremstadt	 Very limited Seepage Slope	 1.00 0.21	 Somewhat limited Seepage 	 0.07	 Very limited No ground water	 1.00	
Cress	 Very limited Seepage Slope	 1.00 0.15	 Somewhat limited Seepage 	 0.50 	 Very limited No ground water 	 1.00	
1080B: Spoonerhill	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.10	 Very limited No ground water 	 1.00	
Spoonerhill, stony	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 0.99 0.11	 Very limited No ground water 	 1.00 	
Cress	 Very limited Seepage	1.00	 Somewhat limited Seepage		 Very limited No ground water	1.00	
1653C: Stanberry	 Somewhat limited Seepage 	 0.04 	 Very limited Depth to saturated zone Thin layer Seepage	0.99	 Very limited No ground water 	 1.00 	
Parkfalls	 Somewhat limited Seepage 	 0.04 	 Very limited Depth to saturated zone Thin layer Seepage	 1.00 0.77 0.07	 Very limited No ground water 	 1.00 	

Table 21.--Water Management--Continued

Map symbol and soil name	Pond reservoir areas		Embankments, dike	s, and	Aquifer-fed excavated ponds	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1653C: Wozny	 Somewhat limited Seepage 	 0.72 	Very limited Depth to saturated zone Piping Ponding Thin layer Seepage	 1.00 1.00 1.00 0.11 0.09	 Very limited No ground water 	 1.00
2015: Pits	 Not rated 	 	 Not rated 		 Not rated 	
2050: Landfill	 Not rated	 	 Not rated		 Not rated	
3011A: Barronett	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Piping Ponding	 1.00 1.00 1.00	 Very limited Cutbanks cave Slow refill 	 1.00 0.28
3125A: Meehan	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	 1.00 0.82	 Very limited Cutbanks cave 	1.00
3126A: Wurtsmith	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	0.99	 Very limited Cutbanks cave Depth to water	 1.00 0.01
3276A: Au Gres	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Seepage	1.00	 Very limited Cutbanks cave 	1.00
3312B: Glendenning, very stony	 Somewhat limited Seepage 	 0.72	Very limited Depth to saturated zone Seepage	 1.00 0.04	 - Very limited No ground water -	 1.00
Glendenning	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Seepage	 1.00 0.04	 Very limited No ground water 	 1.00
3336A: Fenander	 Somewhat limited Seepage 	 0.72 	 Very limited Depth to saturated zone Ponding	 1.00 1.00	 Very limited Cutbanks cave Slow refill 	 1.00 0.28

Table 21.--Water Management--Continued

Map symbol Pond reservoir areas and soil name		 Embankments, dikes levees	, and	Aquifer-fed excavated ponds		
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3403A: Loxley	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to	 1.00 	 Somewhat limited Cutbanks cave 	 0.10
	 		saturated zone Piping Ponding	 1.00 1.00	 	
Beseman	Very limited Seepage - -	 1.00 	Very limited Content of organic matter Depth to saturated zone Piping Ponding	 1.00 1.00 1.00	Somewhat limited Cutbanks cave 	 0.10
Dawson	 Very limited Seepage 	 1.00 	Very limited Content of organic matter Depth to saturated zone Ponding Seepage	į	 Very limited Cutbanks cave 	 1.00
3424C: Frogcreek	 Somewhat limited	 	 Very limited	 	 Very limited	
•	Seepage 	0.04		1.00 0.11 0.09	: -	1.00
Magroc	 Very limited Seepage Depth to bedrock 	 1.00 0.10 	 Very limited Depth to saturated zone Thin layer Seepage	 1.00 0.11 0.10	 Very limited No ground water 	 1.00
Stinnett	 Somewhat limited Seepage 	 0.72 	Very limited Depth to saturated zone Piping Thin layer Seepage	 1.00 1.00 0.11 0.09	 Very limited No ground water 	 1.00
Rock outcrop	 Not limited		 Not rated		 Not rated	
3446A: Newson	 Very limited Seepage 	 1.00 	 Very limited Depth to saturated zone Ponding Seepage	 1.00 1.00 0.82	 Very limited Cutbanks cave 	 1.00
3448B: Grettum	 Very limited Seepage 	 1.00 	 Somewhat limited Seepage 	 0.58 	 Very limited Cutbanks cave Depth to water	 1.00 0.96

Table 21.--Water Management--Continued

Map symbol and soil name	 Pond reservoir ar 	eas	 Embankments, dikes levees 	, and	Aquifer-fed excavated pond	s
	Rating class and	Value		Value	Rating class and	Value
	limiting features	1	limiting features	1	limiting features	<u> </u>
3448C:	 		 	 		
Grettum	Very limited	į	Somewhat limited	į	Very limited	į
	Seepage	1.00	Seepage	0.58	Cutbanks cave	1.00
					Depth to water	0.96
3516A:	 	 	 	 	 	
Slimlake	 Very limited	i	Somewhat limited	İ	 Very limited	ì
	Seepage	1.00	Depth to	0.86	Cutbanks cave	1.00
		į	saturated zone	į	Depth to water	0.06
			Seepage	0.79		
3629B:	 	 	 	 	 	
Perida	 Verv limited	i	 Somewhat limited		 Very limited	i
	Seepage	1.00	Seepage	0.72	No ground water	1.00
	İ	i	Depth to	0.09		İ
			saturated zone	ĺ		İ
M-W:	 	 	 	 	 	
Miscellaneous water	 Not rated		 Not rated		 Not rated	
	İ	İ		İ	İ	İ
W:						
Water	Not rated		Not rated	ļ	Not rated	ļ
		<u> </u>				<u> </u>

Table 22a.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Rapid infiltrati		Slow rate treatment		
and soil name	of wastewater		of wastewater		
	Rating class and	Value	Rating class and	Valu	
	limiting features	<u> </u>	limiting features	i	
3A: Totagatic	 Very limited		 Very limited		
10cagacic	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity		
	saturated zone	İ	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
			Flooding	1.00	
			Ponding	1.00	
			Too acid	0.77	
Bowstring	 Very limited		 Very limited		
g	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity	i	
	saturated zone	į	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
	Restricted	0.69	Low adsorption	1.00	
	permeability		Flooding	1.00	
			Ponding	1.00	
Ausable	 Very limited		 Very limited		
	Flooding	1.00	Filtering	1.00	
	Depth to	1.00	capacity	i	
	saturated zone	į	Depth to	1.00	
	Ponding	1.00	saturated zone	İ	
	Restricted	0.69	Flooding	1.00	
	permeability		Ponding	1.00	
			Too acid	0.07	
22A:					
Comstock	Very limited	į	 Very limited	i	
	Restricted	1.00	Depth to	1.00	
	permeability		saturated zone		
	Depth to	1.00	Too acid	0.31	
	saturated zone		Restricted	0.21	
			permeability		
24A:					
Poskin	Very limited	į	Very limited	į	
	Depth to	1.00	Filtering	1.00	
	saturated zone		capacity		
	Restricted	1.00	Depth to	1.00	
	permeability		saturated zone		
			Too acid	0.31	
27A:					
Scott Lake	Very limited	İ	 Very limited	İ	
	Depth to	1.00	Filtering	1.00	
	saturated zone		capacity		
	Restricted	1.00	Depth to	0.86	
	permeability		saturated zone		
			Too acid	0.31	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
28B: Haugen, very stony	 Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	 0.99 0.91 0.60 0.08	
Haugen	 Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	 0.99 0.91 0.60 0.08	
Rosholt, very stony	 Very limited Restricted permeability 	 1.00 	 Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08	
Rosholt	 Very limited Restricted permeability 	 1.00 	 Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08	
28C: Haugen, very stony	 Very limited Restricted permeability Slope Depth to saturated zone	 1.00 1.00 1.00 0.99 	Very limited Too steep for surface application Depth to saturated zone Too acid Restricted permeability Too steep for sprinkler application	 1.00 0.99 0.60 0.50	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
28C:	 		 		
Haugen	Very limited Restricted permeability		Very limited Too steep for surface	1.00	
	Slope Depth to saturated zone	1.00 0.99 	application Depth to saturated zone	0.99	
	 		Too acid Restricted permeability Too steep for	0.91 0.60 0.50	
	 		sprinkler application		
Rosholt, very stony	Very limited Slope Restricted	 1.00 1.00	Very limited Filtering capacity	1.00	
	permeability		Too steep for surface application	1.00	
			Too steep for sprinkler	0.50	
	 	 	application Too acid	0.31	
Rosholt	Very limited Slope Restricted	 1.00 1.00	Very limited Filtering capacity	1.00	
	permeability		Too steep for surface	1.00	
	 	 	application Too steep for sprinkler	 0.50 	
	 		application Too acid 	 0.31 	
33B: Chetek	 Very limited Restricted	 1.00	 Very limited Filtering	 1.00	
	permeability 		capacity Too steep for surface	0.08	
	 	 	application Too acid	0.07	
33C: Chetek	 Very limited Restricted	 1.00	 Very limited Filtering	 1.00	
	permeability Slope 	 1.00 	capacity Too steep for surface	 1.00 	
	 		application Too steep for sprinkler application	0.50	
	 		Too acid	0.07	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	 Rapid infiltrati of wastewater 		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
38A: Rosholt	 Very limited Restricted permeability	 1.00 	 Very limited Filtering capacity Too acid	 1.00 0.31	
38B: Rosholt	 Very limited Restricted permeability 	 1.00 	 Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08	
38C: Rosholt	 Very limited Slope Restricted permeability 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 0.50 0.31	
38D: Rosholt	 Very limited Slope Restricted permeability 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 0.31	
42D: Amery	 Very limited Slope Restricted permeability 	 1.00 1.00 1.00	Very limited Too steep for surface application Too steep for sprinkler application Too acid Restricted permeability	 1.00 1.00 1.00 1.00 0.77 0.21	
43B: Antigo	 Very limited Restricted permeability 	 1.00 	 Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
43C: Antigo	Very limited Restricted permeability Slope	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application	 1.00 1.00 0.94	
43D: Antigo	 	 1.00 1.00 	Too acid Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	0.31 1.00 1.00 1.00 1.00 1.00	
48A: Brill	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 1.00 0.31	
63A: Crystal Lake	 Very limited Restricted permeability Depth to saturated zone	 1.00 1.00 	 Very limited Depth to saturated zone Too acid Restricted permeability	 0.99 0.31 0.21	
63B: Crystal Lake	: -	 1.00 1.00 	saturated zone	 0.99 0.31 0.21 0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment of wastewater		
	Rating class and	Value	Rating class and limiting features	Value	
63C: Crystal Lake	 Very limited Restricted permeability Depth to	 1.00 1.00	 Very limited Too steep for surface application	 1.00	
	saturated zone Slope 	 1.00 	Depth to saturated zone Too steep for sprinkler application	0.99	
63E:			Too acid Restricted permeability	0.31	
Crystal Lake	Slope Restricted permeability	 1.00 1.00	 Very limited Too steep for surface application	1.00	
	Depth to saturated zone 	1.00 	Too steep for sprinkler application Depth to saturated zone Too acid Restricted permeability	1.00 0.86 0.31 0.21	
64A: Totagatic	 Very limited Flooding Depth to saturated zone Ponding	 1.00 1.00 1.00	 Very limited Filtering capacity Depth to saturated zone Flooding Ponding Too acid	 1.00 1.00 1.00 0.77	
Winterfield	 Very limited Flooding Depth to saturated zone 	 1.00 1.00 	 Very limited Filtering capacity Depth to saturated zone Flooding	 1.00 1.00 1.00	
69B: Keweenaw	 Somewhat limited Restricted permeability 	 0.61 	Somewhat limited Too acid Too steep for surface application Filtering capacity	 0.77 0.08 0.01	
Sayner	 Somewhat limited Restricted permeability 	 0.31 	Very limited	 1.00 0.77 0.08	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment of wastewater		
	Rating class and limiting features	Value	Rating class and limiting features	Value	
69B: Vilas	 Not limited 		 Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08	
69C: Keweenaw	Slope	1.00	 Very limited Too steep for	 1.00	
	Restricted permeability	0.61 	surface application Too steep for sprinkler application Too acid Filtering capacity	 0.78 0.77 0.01	
Sayner	Very limited Slope Restricted permeability	 1.00 0.31 	 Very limited Filtering capacity Too steep for surface application	 1.00 1.00	
	 		Too steep for sprinkler application Too acid	0.78 0.77	
Vilas	 Very limited Slope 	1.00	Very limited Filtering capacity Too steep for surface	 1.00 1.00	
			application Too steep for sprinkler application Too acid	0.78	
69E: Keweenaw	 Very limited Slope Restricted permeability	 1.00 0.61	 Very limited Too steep for surface application	 1.00	
	Permeability		Too steep for sprinkler application Too acid Filtering capacity	 1.00 0.77 0.01	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		 Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
69E: Sayner	 Very limited	 	 Very limited	
	Slope Restricted	1.00	Filtering capacity	1.00
	permeability 	 	Too steep for surface application	1.00
	 	 	Too steep for sprinkler application	1.00
			Too acid	0.77
Vilas	Very limited Slope 	1.00	Very limited Filtering capacity	1.00
	 		Too steep for surface application	1.00
	 	 	Too steep for sprinkler application	1.00
74B:	 		Too acid	0.31
Vilas	 Not limited 	 	 Very limited Filtering	1.00
	 	 	capacity Too acid 	0.31
74C: Vilas	 Very limited Slope 	 1.00	 Very limited Filtering capacity	 1.00
	 	 	Too steep for surface application	1.00
	 	 	Too steep for sprinkler application	0.94
74D:		 	Too acid	0.31
Vilas	 Very limited Slope	1.00	 Very limited Filtering	1.00
	 	 	capacity Too steep for surface	1.00
	 	 	application Too steep for sprinkler	 1.00
	 	 	application Too acid 	 0.31
100B: Menahga	 Not limited 	 	 Very limited Filtering	 - 1.00
	 	 	capacity Too acid	0.99

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	 Rapid infiltrati of wastewater 		 Slow rate treatm of wastewater 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
100C: Menahga	 Very limited Slope	 1.00	 Very limited Filtering	 1.00
	Slope 		capacity Too steep for surface	1.00
			application Too acid Too steep for sprinkler application	 0.99 0.50
100D: Menahga	 Very limited Slope 	 1.00	 Very limited Filtering capacity	 1.00
	 		Too steep for surface application Too steep for sprinkler	1.00 1.00
	 		application Too acid	 0.99
127D: Amery	 Very limited Slope Restricted	 1.00 1.00	 Very limited Too steep for surface	 1.00
	permeability 		application Too steep for sprinkler application Too acid	 1.00
	 	 	Too acid Restricted permeability 	0.77 0.21
Rosholt	Very limited Slope Restricted permeability	 1.00 1.00	Very limited Filtering capacity Too steep for	 1.00 1.00
		 	surface application Too steep for sprinkler application	 1.00
127E:	 		Too acid	0.31
Amery	Slope Restricted	 1.00 1.00	Very limited Too steep for surface	 1.00
	permeability 		application Too steep for sprinkler application	1.00
	 		Too acid Restricted permeability	0.77 0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
127E: Rosholt	 Very limited	 	 Very limited	
	Slope Restricted	1.00	Filtering capacity	1.00
	permeability 	 	Too steep for surface application	1.00
	 	 	Too steep for sprinkler application	1.00
			Too acid	0.31
156B: Magnor, very stony	 Very limited Restricted	 1.00	 Very limited Depth to	 1.00
	permeability Depth to	1.00	saturated zone Too acid	0.85
	saturated zone Too acid	0.03	Restricted permeability	0.43
Magnor	Restricted	1.00	 Very limited Depth to	1.00
	permeability Depth to	1.00	saturated zone Too acid	0.85
	saturated zone Too acid	0.03	Restricted permeability	0.43
157B:		 		
Freeon, very stony	Very limited Restricted permeability Depth to saturated zone	 1.00 1.00 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	 1.00 0.77 0.43 0.08
Freeon	Very limited Restricted	1.00	Very limited Depth to	1.00
	permeability	1.00	saturated zone	
	Depth to saturated zone 		Restricted permeability Too steep for surface application	0.85 0.43 0.08
157C:	 		 	!
Freeon, very stony	Very limited Restricted permeability Depth to saturated zone Slope	 1.00 1.00 1.00	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application	 1.00 1.00 0.77 0.50
	 	 	Restricted permeability	0.43

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name		Rapid infiltration of wastewater		ent
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
157C:	į	į		į
Freeon	: -	1 00	Very limited	1 00
	Restricted permeability	1.00	Depth to saturated zone	1.00
	Depth to	1.00	Too steep for	1.00
	saturated zone	İ	surface	İ
	Slope	1.00	application	
	 		Too acid Too steep for	0.85
	 	1	sprinkler	0.50
			application	
	İ	į	Restricted	0.43
			permeability	
160A:	 	1	 	
Oesterle	 Very limited		 Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	0.61	Depth to	1.00
	permeability	1	saturated zone Too acid	0.77
		İ		
182B:	!			
Padus	Very limited Restricted	1.00	Very limited Filtering	1.00
	permeability	1	capacity	1
			Too acid	0.31
182C: Padus	 Very limited	l I	 Very limited	
	Restricted	1.00	Filtering	1.00
	permeability	ĺ	capacity	İ
	Slope	1.00	Too steep for	1.00
	l I		surface application	
	 		Too steep for	0.94
		İ	sprinkler	
			application	
	 		Too acid	0.31
192A:	 		 	
Worcester	 Very limited	İ	 Very limited	İ
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	1.00	Depth to saturated zone	1.00
	permeability	1	Too acid	0.31
		İ		
193A:				
Minocqua	-	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Filtering capacity	1.00
	Restricted	1.00	Depth to	1.00
	permeability	İ	saturated zone	i
	1 2			
	Ponding	1.00	Ponding Too acid	1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
		<u> </u>		1
215B: Pence	 Somewhat limited Restricted permeability	 0.61 	 Very limited Filtering capacity Too acid	 1.00 0.31
0150	į	į		į
215C: Pence	 Very limited Slope Restricted	 1.00 0.61	 Very limited Filtering capacity	1.00
	permeability		Too steep for surface application	1.00
	 		Too steep for sprinkler application Too acid	0.94 0.31
			100 acid	
215D: Pence	 Very limited Slope Restricted	 1.00 0.61	 Very limited Filtering capacity	1.00
	permeability		Too steep for surface application	1.00
	 		Too steep for sprinkler application	1.00
			Too acid	0.31
315A: Rib	 -	į	 	į
KID	Very limited Depth to saturated zone	1.00	Very limited Filtering capacity	1.00
	Restricted permeability Ponding	1.00 1.00	Depth to saturated zone Ponding	1.00 1.00
			Too acid	0.31
337A:			 	
Plover	Very limited Restricted permeability	 1.00	Very limited Depth to saturated zone	1.00
	Depth to saturated zone	1.00	Restricted permeability	0.60
			Too acid 	0.31
368B: Mahtomedi	 Not limited		 Very limited Filtering	 1.00
			capacity	į
	 		Too acid Too steep for surface	0.42
	 		application	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
368B:	 		 	
Cress	Very limited	į	Very limited	į
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
			Too acid	0.31
	 		Too steep for surface	0.08
			application	
368C:	 			
Mahtomedi	Very limited	İ	Very limited	İ
	Slope	1.00	Filtering	1.00
			capacity	
	 		Too steep for surface	1.00
			application	
		İ	Too steep for	0.50
		İ	sprinkler	İ
			application	
	 		Too acid 	0.42
Cress	Very limited	İ	Very limited	İ
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Slope	1.00	Too steep for surface	1.00
	 		application	
		i	Too steep for	0.50
	j	į	sprinkler	į
			application	
	 		Too acid	0.31
368D:	 	į	 	į
Mahtomedi	Very limited Slope	1.00	Very limited Filtering	1.00
			capacity	
		į	Too steep for	1.00
			surface	
			application	
			Too steep for	1.00
	 		sprinkler application	
			Too acid	0.42
Cress	 Very limited		 Very limited	
	Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	į
	permeability	[Too steep for	1.00
			surface	
			application	1 00
	 	I	Too steep for sprinkler	1.00
	! 		application	
		i	Too acid	0.31

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	 Rapid infiltrati of wastewater 		 Slow rate treatm of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
371A: Croswell	 Very limited Depth to saturated zone 	 1.00 	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 0.99 0.31
380B: Cress	 Very limited Restricted permeability 	 1.00 	Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08
Rosholt	Very limited Restricted permeability	 1.00 	Very limited Filtering capacity Too acid Too steep for surface application	 1.00 0.31 0.08
380C: Cress	 Very limited Restricted permeability Slope 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 0.50 0.31
Rosholt	 Very limited Slope Restricted permeability 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 0.50 0.31
380D: Cress	 Very limited Slope Restricted permeability 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
2000.				
380D: Rosholt	 Verv limited		 Very limited	
	Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	į
	permeability		Too steep for	1.00
			surface	
	 		application Too steep for	1.00
	 		sprinkler	
			application	i
	İ	j	Too acid	0.31
383B: Mahtomedi	 Not limited		 Very limited	
Mancomedi			Filtering	1.00
		İ	capacity	
	j	j	Too acid	0.42
	!			[
383C:	 			
Mahtomedi	Very limited Slope	1.00	Very limited Filtering	1.00
	Slope	1.00	capacity	1
			Too steep for	1.00
	j	j	surface	į
			application	
			Too steep for	0.50
			sprinkler application	
	 		Too acid	0.42
		j		i
383D:	!			
Mahtomedi	:		Very limited	
	Slope	1.00	Filtering capacity	1.00
			Too steep for	1.00
	j	j	surface	į
	[application	
			Too steep for	1.00
	 		sprinkler application	
	 		Too acid	0.42
		İ		i
396B:	[[
Friendship			Very limited	
	Depth to saturated zone	1.00	Filtering capacity	1.00
	Sacuraced Zone		Too acid	0.21
Wurtsmith	Very limited		Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone Too acid	0 03	capacity	1 00
	100 acid	0.03	Too acid Depth to	1.00
			saturated zone	
Grayling			Very limited	
	Too acid	0.21	Filtering	1.00
		1	capacity Too acid	1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and limiting features	Value
397A: Perchlake	Very limited Depth to saturated zone	 1.00 	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 1.00 0.77
399B: Grayling	 Somewhat limited Too acid	 0.21 	 Very limited Filtering capacity Too acid	1.00
399C: Grayling	 Very limited Slope Too acid 	 1.00 0.21 	Very limited Filtering capacity Too acid Too steep for surface application Too steep for sprinkler application	 1.00 1.00 1.00 0.50
399D: Grayling	 Very limited Slope Too acid 	 1.00 0.21 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 1.00
405A: Lupton	 Very limited Depth to saturated zone Ponding Restricted permeability	 1.00 1.00 0.69	 Very limited Depth to saturated zone Ponding	 1.00 1.00
Cathro	Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding Too acid	 1.00 1.00 0.07
Tawas		 1.00 1.00 0.69	Very limited Filtering capacity Depth to saturated zone Ponding	 1.00 1.00 1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	1
406A:	İ		 	
Loxley	Very limited	į	 Very limited	İ
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.69	Too acid Ponding	1.00
	permeability		Foliating	1
407A:				
Seelyeville	 Very limited	İ	 Very limited	İ
•	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.68	Too acid	0.31
	permeability			
Manlana	 			
Markey	Very limited Depth to	1.00	Very limited Filtering	1.00
	saturated zone	1	capacity	1
	Restricted	1.00	Depth to	1.00
	permeability	i	saturated zone	i
	Ponding	1.00	Ponding	1.00
410A:				
Seelyeville	: -		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone Ponding	1.00	saturated zone Ponding	1.00
	Restricted	0.68	Too acid	0.31
	permeability			
	į	į		j
Cathro	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Ponding Too acid	1.00
	permeability Ponding	1.00	Too acid	0.07
412A:	İ	İ		İ
Rifle	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Restricted	0.31	Filtering	0.01
	permeability		capacity	l
Tacoosh	 Very limited		 Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i
	Restricted	1.00	Ponding	1.00
	permeability			
	Ponding	1.00		
	ronaing		1	
4153			l 	1
415A:			Vorus limited	
415A: Greenwood	 Very limited	 1.00	 Very limited Depth to	
	 - Very limited Depth to	 1.00	Depth to	 1.00
	 Very limited	 1.00 1.00	-	 1.00 1.00
	 Very limited Depth to saturated zone	į	Depth to saturated zone	į

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
439B: Graycalm	 Not limited 	 	 Very limited Filtering capacity Too acid	 1.00 0.99
Menahga	 Not limited 	 	 Very limited Filtering capacity Too acid	1.00
439C: Graycalm	 Very limited Slope 	 1.00 	Very limited Filtering capacity Too steep for surface application Too acid Too steep for sprinkler application	 1.00 1.00 0.99 0.50
Menahga	 Very limited Slope 	 1.00 	Very limited Filtering capacity Too steep for surface application Too acid Too steep for sprinkler application	 1.00 1.00 0.99 0.50
439D: Graycalm	 Very limited Slope 	 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00 0.99
Menahga	 Very limited Slope 	 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 0.99

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and limiting features	Value
441C:	 		 	
Freeon	 Very limited	İ	 Very limited	İ
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too steep for	1.00
	saturated zone	1.00	surface application	l
	blope		Too steep for	0.94
		İ	sprinkler	
		Ì	application	İ
			Too acid	0.85
	l I	 	Restricted permeability	0.43
			permeability	
Cathro	 Very limited	į	 Very limited	j
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted permeability	1.00	Ponding Too acid	1.00
	Ponding	1.00		
				į
442C:	 		 	
Haugen	Very limited Restricted	1.00	Very limited Depth to	0.99
	permeability		saturated zone	
	Depth to	0.99	Too steep for	0.92
	saturated zone		surface	
	Slope	0.88	application	
	 		Too acid Restricted	0.91
	 	l I	permeability	
		İ	Too steep for	0.06
	İ	Ì	sprinkler	İ
			application	
Greenwood	 Verv limited		 Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone Too acid	1.00
	permeability		Ponding	1.00
	į -	İ	ĺ	İ
443D:	 		 	
Amery	Very limited Slope	1.00	Very limited Too steep for	1.00
	Restricted	1.00	surface	
	permeability	į	application	İ
			Too steep for	1.00
			sprinkler	
	 		application Too acid	0 21
	 		Restricted	0.31
		İ	permeability	
	 		permeability	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
443D:			 	
Greenwood	 Very limited		 Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone	İ	capacity	
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted permeability	0.61	Too acid Ponding	1.00
461A:				
Bowstring	Very limited		Very limited	
	Flooding	1.00	Filtering	1.00
	Depth to	1.00	capacity	1 00
	saturated zone Ponding	1.00	Depth to saturated zone	1.00
	Restricted	0.69	Low adsorption	1.00
	permeability		Flooding	1.00
	į -	į	Ponding	1.00
484A:				
Greenwood	Very limited Depth to	1.00	Very limited Filtering	1 00
	saturated zone	1	capacity	1.00
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.61	Too acid	1.00
	permeability		Ponding	1.00
Beseman	Very limited	i	 Very limited	i
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	1.00
	saturated zone	11 00	Ponding	1.00
	Ponding	1.00	Restricted permeability	0.21
495B:			 	
Karlsborg	Very limited		Very limited	
	Restricted	1.00	Filtering	1.00
	permeability Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
		i	Restricted	0.98
	İ	į	permeability	İ
			Too acid	0.77
		1	Too steep for	0.08
			surface application	
Grettum	 Very limited		 Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	[1	Too acid	0.85
			Too steep for	0.08
		1	surface	
	1	1	application	1

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatmen	
	Rating class and limiting features	Value	Rating class and limiting features	Value
495B:	 			
Perida	Very limited	i	 Very limited	i
	Restricted	1.00	Filtering	1.00
	permeability	İ	capacity	İ
	Depth to	0.09	Restricted	1.00
	saturated zone		permeability	
			Too acid	0.85
			Depth to	0.09
			saturated zone	
			Too steep for	0.08
			surface	
			application	!
495C:	 		 -	
Karlsborg	 Verv limited		 Very limited	
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	İ
	Slope	1.00	Too steep for	1.00
		İ	surface	İ
			application	
			Restricted	0.98
			permeability	
			Too acid	0.77
Grettum	 Very limited		 Very limited	
GIeccum	Depth to	1.00	Filtering	1.00
	saturated zone	1	capacity	1
	Slope	1.00	Too steep for	1.00
			surface	
		i	application	i
		i	Too acid	0.85
	İ	i	Too steep for	0.50
	j	İ	sprinkler	İ
	İ		application	İ
Perida	Very limited		Very limited	
	Restricted	1.00	Filtering	1.00
	permeability	1 00	capacity	
	Slope	1.00	Restricted	1.00
	Depth to saturated zone	0.09	permeability Too steep for	1.00
	Saturated Zone	I	surface	1
	 		application	
	! 		Too acid	0.85
	! 		Too steep for	0.50
			sprinkler	
		İ		i
	 	 	sprinkler application 	

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
495D:	 			
Karlsborg	Very limited Slope Restricted	 1.00 1.00	Very limited Filtering capacity	1.00
	permeability Depth to	1.00	Depth to saturated zone	1.00
	saturated zone	 	Too steep for surface application	1.00
	 	 	Too steep for sprinkler application	1.00
	 	 	Restricted permeability	0.98
Grettum	Very limited Slope Depth to	 1.00 1.00	 Very limited Filtering capacity	1.00
	saturated zone		Too steep for surface	1.00
	 	 	application Too steep for sprinkler application	1.00
	 	 	Too acid	0.85
Perida	Very limited Slope Restricted	 1.00 1.00	Very limited Filtering capacity	 1.00
	permeability Depth to saturated zone	0.09	Too steep for surface application	1.00
		 	Too steep for sprinkler application	1.00
	 		Restricted permeability Too acid	1.00
497A:	 	 	100 acid 	
Meenon	 Very limited Restricted permeability	 1.00	 Very limited Filtering capacity	1.00
	Depth to saturated zone	1.00		1.00
	 	 	permeability Too acid	0.31
515A: Manitowish	 Very limited Depth to	 1.00	 Very limited Filtering	1.00
	saturated zone Restricted	0.61	capacity Depth to	0.86
	permeability 	 	saturated zone Too acid 	0.31

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
	 Very limited Restricted permeability Depth to saturated zone Ponding	 1.00 1.00 1.00	Very limited Filtering capacity Depth to saturated zone Ponding Restricted permeability Too acid	 1.00 1.00 1.00 0.98 0.31
524E: Rock outcrop	 Not rated		 Not rated	
Frogcreek	 Very limited Restricted permeability Depth to saturated zone	 1.00 1.00	Very limited Depth to saturated zone Too steep for surface	 1.00 1.00
	Slope	1.00	application Too acid Too steep for sprinkler application Restricted permeability	 0.31 0.22 0.21
Metonga	 Very limited Slope Depth to bedrock Restricted permeability Too acid	 1.00 1.00 1.00 0.03	Very limited Depth to bedrock Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 0.31
542B: Haugen, very stony	 Very limited	 	 Very limited	
	Restricted permeability Depth to saturated zone	1.00	Depth to saturated zone Too acid Restricted permeability Too steep for surface application	0.99 0.91 0.60 0.08
Haugen	 Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	 0.99 0.91 0.60 0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm	
	Rating class and limiting features	Value	Rating class and limiting features	Value
542C: Haugen, very stony	Very limited Restricted permeability Slope Depth to saturated zone	 1.00 1.00 0.99	 Very limited Too steep for surface application Depth to saturated zone Too acid	 1.00 0.99 0.91
			Restricted permeability Too steep for sprinkler application	0.51
Haugen	Very limited Restricted permeability Slope Depth to saturated zone	 1.00 1.00 0.99 	Very limited Too steep for surface application Depth to saturated zone Too acid Restricted permeability Too steep for sprinkler application	 1.00 0.99 0.91 0.60 0.50
543B: Anigon	 Restricted permeability 	 1.00 	Very limited	 1.00 0.31 0.08
543C2: Anigon	 Very limited Restricted permeability Slope 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 0.50 0.31
544F: Menahga	 Very limited Slope 	 1.00 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Too acid	 1.00 1.00 1.00 1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm of wastewater	
	Rating class and	Value	Rating class and limiting features	Value
544F: Mahtomedi	 Verv limited	 	 Very limited	
	Slope	1.00	Filtering capacity	1.00
	 		Too steep for surface application	1.00
	 		Too steep for sprinkler application	1.00
	 	 	Too acid	0.42
555A: Fordum	 Very limited		 Very limited	
FOI dum	Flooding Depth to	1.00	Filtering capacity	1.00
	saturated zone Restricted permeability	1.00	Depth to saturated zone Flooding	1.00 1.00
	Ponding	1.00	Ponding Ponding	1.00
574B: Sayner	 Somewhat limited		 Very limited	
	Restricted permeability	0.31	Filtering capacity Too acid	1.00 0.77
		į		
574C: Sayner	 Very limited Slope	 1.00	 Very limited Filtering	 1.00
	Restricted permeability	0.31	capacity Too steep for	1.00
	 	 	surface application Too steep for	 0.94
	 	 	sprinkler application Too acid	 0.77
574E:	 		 	
Sayner	Very limited Slope Restricted	 1.00 0.31	Very limited Filtering capacity	1.00
	permeability		Too steep for surface application	1.00
			Too steep for sprinkler	1.00
	 	 	application Too acid	0.77
579B: Parkfalls		<u> </u> 	 Very limited	İ İ
	Restricted permeability Depth to	1.00 1.00	Depth to saturated zone Too acid	1.00 0.77
	saturated zone 		Restricted permeability	0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
600A: Haplosaprists	 Not rated		 Not rated	
Psammaquents	 Not rated		 Not rated	
615B:	 		 	
Cress	 Very limited	i	 Very limited	i
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
			Too acid	0.31
615C:	 		 	l
Cress	 Very limited	i	 Very limited	
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Slope	1.00	Too steep for	1.00
			surface	
	l I		application Too steep for	0.50
	 	i	sprinkler	0.50
		i	application	i
	İ	į	Too acid	0.31
615D:	 Town limited		 Very limited	
Cress	Very limited Slope	1.00	Filtering	1.00
	Restricted	1.00	capacity	
	permeability	j	Too steep for	1.00
			surface	
			application	
	 		Too steep for sprinkler	1.00
	 		application	
		i	Too acid	0.31
		İ		
623A:				
Capitola	Very limited	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Restricted	1.00	Ponding	1.00
	permeability	į	Too acid	0.31
	Ponding	1.00	Filtering	0.01
			capacity	
624A:	 		 	l
Ossmer	 Very limited	i	 Very limited	i
	Depth to	1.00	Filtering	1.00
	saturated zone		capacity	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone Too acid	0.31
			100 acid	
632A:	į	i		i
Aftad	Very limited		Very limited	
	Restricted	1.00	Depth to	0.99
	permeability		saturated zone	
	Depth to saturated zone	1.00	Too acid	0.31
		1	Vestiinied	0.41
		İ	permeability	ĺ

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	 Rapid infiltrati of wastewater 		 Slow rate treatm of wastewater 	
	Rating class and limiting features	Value	Rating class and limiting features	Value
632B: Aftad	 Very limited Restricted permeability Depth to saturated zone	 1.00 1.00 		 0.99 0.31 0.21 0.08
632C: Aftad	 Very limited Restricted	 1.00	 Very limited Too steep for	 1.00
	permeability Depth to saturated zone Slope	 1.00 1.00 	surface application Depth to saturated zone Too steep for sprinkler application Too acid	 0.99 0.50 0.31
633F: Pence	 - Very limited Slope Restricted permeability	 1.00 0.61 	Restricted permeability Very limited Filtering capacity Too steep for surface application	0.21 1.00 1.00
		 	Too steep for sprinkler application	1.00
Padus	Very limited Slope Restricted permeability	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application	 1.00 1.00
648B:		 	Too steep for sprinkler application Too acid	1.00 0.31
	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00 	Very limited Depth to saturated zone Too acid Too steep for surface application	 1.00 0.31 0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
670C:			 	
Keweenaw	 Very limited Slope Restricted	 1.00 0.61	 Very limited Too steep for surface	1.00
	permeability 	 	application Too steep for sprinkler application	 0.94
	 	 	Too acid Filtering capacity	0.77 0.01
Pence	Very limited Slope Restricted	1.00	Very limited Filtering capacity	1.00
	permeability 	 	Too steep for surface application Too steep for	1.00 0.94
			sprinkler application Too acid	0.31
670E:				
Keweenaw	 Very limited Slope Restricted permeability	 1.00 0.61	Very limited Too steep for surface application	1.00
	permeability 		Too steep for sprinkler application	1.00
	 		Too acid Filtering capacity	0.77 0.01
Pence	 Very limited Slope Restricted	 1.00 0.61	 Very limited Filtering capacity	1.00
	permeability 		Too steep for surface application	1.00
	 	 	Too steep for sprinkler application Too acid	1.00 0.31
4745	į	į		į
671B: Spoonerhill, stony	 Very limited Restricted permeability	1.00	 Very limited Depth to saturated zone	 0.99
	Depth to saturated zone	0.99	Too acid Restricted permeability	0.31
	 		Too steep for surface application	0.08
	 	 	Filtering capacity 	0.01

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
671B: Spoonerhill	 Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface	 0.99 0.31 0.21 0.08
680B:	 	 	application Filtering capacity 	0.01
Stanberry, stony	Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Filtering capacity Depth to saturated zone Restricted permeability Too steep for	 1.00 0.99 0.21 0.08
Pence, stony	 - Somewhat limited Restricted permeability 	 0.61 	surface application Too acid Very limited Filtering capacity Too acid Too steep for surface	 0.03 1.00 0.31 0.08
683A: Tipler	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	application Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 0.86 0.31
706A: Winterfield	 Very limited Flooding Depth to saturated zone	 1.00 1.00 	 Very limited Filtering capacity Depth to saturated zone Flooding	 1.00 1.00 1.00
Totagatic	 Very limited Flooding Depth to saturated zone Ponding 	 1.00 1.00 1.00 	Very limited Filtering capacity Depth to saturated zone Flooding Ponding Too acid	 1.00 1.00 1.00 1.00 0.42

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
724A: Rib	 Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 	Very limited Filtering capacity Depth to saturated zone Ponding Too acid	 1.00 1.00 1.00 0.31
Rock outcrop	 Not rated		 Not rated	
726B: Sissabagama	 Very limited Restricted permeability Depth to saturated zone	 1.00 1.00 	Very limited Filtering capacity Depth to saturated zone Restricted permeability Too acid	 1.00 0.86 0.60 0.31
733A: Wozny	 Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 1.00	 Very limited Depth to saturated zone Ponding Too acid Filtering capacity	 1.00 1.00 0.31 0.01
771A: Lenroot	 Very limited Depth to saturated zone 	 1.00 	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 0.99 0.42
827A: Scoba	 Very limited Depth to saturated zone Restricted permeability	 1.00 1.00	Very limited Filtering capacity Depth to saturated zone Too acid	
853C: Frogcreek	 Very limited Restricted permeability Depth to saturated zone Slope 	 1.00 1.00 1.00 	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application Restricted permeability	 1.00 1.00 1.00 0.31 0.22 1 0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati of wastewater		Slow rate treatm	
	Rating class and limiting features	Value	 Rating class and limiting features	Value
853C: Stinnett	Restricted permeability Depth to saturated zone	 1.00 1.00 	 Very limited Depth to saturated zone Too acid Restricted permeability	 1.00 0.31 0.21
Wozny	Very limited Depth to saturated zone Restricted permeability Ponding	 1.00 1.00 1.00	Very limited Depth to saturated zone Ponding Too acid Filtering capacity	 1.00 1.00 0.31 0.01
856B: Stinnett	 Very limited Restricted permeability Depth to saturated zone	 1.00 1.00 	Very limited Depth to saturated zone Too acid Restricted permeability	 1.00 0.31 0.21
857B: Frogcreek		 1.00 1.00 	Very limited Depth to saturated zone Too acid Restricted permeability Too steep for surface application	 1.00 0.31 0.21 0.08
857C: Frogcreek		 1.00 1.00 1.00 1.00 1	Very limited Depth to saturated zone Too steep for surface application Too steep for sprinkler application Too acid Restricted permeability	 1.00 1.00 0.78 0.31 0.21
873B: Stanberry	 Very limited Restricted permeability Depth to saturated zone	 1.00 0.99 	Very limited Filtering capacity Depth to saturated zone Restricted permeability Too steep for surface application Too acid	 1.00 0.99 0.21 0.08 0.08

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
873C: Stanberry	Very limited Restricted permeability Slope Depth to saturated zone	 1.00 1.00 0.99 	Very limited Filtering capacity Too steep for surface application Depth to saturated zone Too steep for sprinkler	 1.00 1.00 0.99
	 		application Restricted permeability	0.21
873D: Stanberry	Very limited Slope Restricted permeability Depth to saturated zone	 1.00 1.00 0.99 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to saturated zone Restricted permeability	 1.00 1.00 1.00 1.00 1.00 0.99 0.21
905A: Cublake	 Very limited Depth to saturated zone Restricted permeability Too acid	 1.00 1.00 0.03	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 0.86 0.77
926A: Flink	 Very limited Depth to saturated zone Restricted permeability Too acid	 1.00 1.00 0.03	 Very limited Filtering capacity Depth to saturated zone Too acid	 1.00 1.00 0.77
943D: Stanberry	 Very limited Restricted permeability Slope Depth to saturated zone	 1.00 1.00 0.99 	Very limited Filtering capacity Too steep for surface application Too steep for sprinkler application Depth to saturated zone Restricted permeability	 1.00 1.00 1.00 0.99

Table 22a.--Agricultural Waste Management--Continued

limiting features limiting features	1.00 1.00 1.00 0.01
943D: Greenwood	1.00
	1.00
Depth to	1.00
saturated zone saturated zone Restricted 1.00 Too acid permeability Ponding Ponding 1.00 Filtering Too acid 0.77 capacity 948A: Billyboy	1.00
Restricted 1.00 Too acid permeability Ponding Ponding 1.00 Filtering Too acid 0.77 capacity Ponding Ponding Too acid 0.77 capacity Ponding Pon	1.00
permeability Ponding Ponding 1.00 Filtering Too acid 0.77 capacity 948A: Billyboy Very limited Very limited Depth to 1.00 Filtering saturated zone capacity Restricted 1.00 Depth to	1.00
Ponding 1.00 Filtering	
948A:	
Billyboy	
Billyboy	
Depth to 1.00 Filtering	
saturated zone capacity Restricted 1.00 Depth to	1 00
Restricted 1.00 Depth to	1.00
! ! !	1.00
permeability saturated zone	
Too acid	0.31
970C:	
Keweenaw Very limited Very limited Slope 1.00 Too steep for	1.00
Restricted 0.61 surface	1.00
permeability application	
	0.94
sprinkler	
application	
	0.77
Filtering capacity	0.01
Capacity	
PenceVery limited Very limited	
Slope 1.00 Filtering	1.00
Restricted 0.61 capacity	
	1.00
surface	
application Too steep for	0.94
sprinkler	0.51
application	
Too acid	0.31
Greenwood	1.00
saturated zone capacity	1.00
	1.00
Too acid 0.77 saturated zone	
Restricted 0.61 Too acid	1.00
permeability Ponding	1.00
0708	
970E:	
	1.00
Restricted 0.61 surface	
permeability application	
· · · · · · · · · · · · · · · · · · ·	1.00
sprinkler	
application	0 77
	0.77
capacity	() - () 1
i i i i i i i i i i i i i i i i i i i	0.01

Table 22a.--Agricultural Waste Management--Continued

	Rapid infiltration of wastewater 		Slow rate treatment of wastewater	
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	1
970E:	İ	İ	İ	į
Pence	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Restricted permeability	0.61	capacity Too steep for	1.00
j	permeasurity	i	surface	
İ		İ	application	i
j		Ì	Too steep for	1.00
			sprinkler	
		ļ	application	
			Too acid	0.31
Greenwood	 Verv limited	İ	 Very limited	1
	Depth to	1.00	Filtering	1.00
	saturated zone	į	capacity	İ
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.61	Too acid	1.00
	permeability	l i	Ponding	1.00
1070C:		i		i
Fremstadt	Very limited	į	Very limited	i
j	Slope	1.00	Too steep for	1.00
	Restricted	0.31	surface	1
	permeability	ļ	application	
			Too steep for sprinkler	0.78
			application	
		i	Too acid	0.31
		į	Filtering	0.01
			capacity	
G	 		 	
Cress	Very limited Restricted	1.00	Very limited Filtering	1.00
	permeability		capacity	
	Slope	1.00	Too steep for	1.00
			surface	
			application	1
		ļ	Too steep for	0.50
			sprinkler application	
		l I	Too acid	0.31
		i		
1070D:		ĺ		İ
Fremstadt	_	1	Very limited	
	Slope	1.00	Too steep for	1.00
	Restricted permeability	0.31	surface application	
	permeabrincy	l I	Too steep for	1.00
		i	sprinkler	
		į	application	į
			Too acid	0.31
		ļ	Filtering	0.01
		ļ	capacity	!

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	 Rapid infiltrati of wastewater 		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
1070D: Cress	 Very limited		 Very limited	
	Slope Restricted permeability 	1.00 1.00 	Filtering capacity Too steep for surface	1.00 1.00
	 	 	application Too steep for sprinkler application	1.00
			Too acid	0.31
1080B: Spoonerhill	 Very limited Restricted	 1.00	 Very limited Depth to	 0.99
	permeability Depth to saturated zone	0.99	saturated zone Too acid Restricted	 0.31 0.21
		 	permeability Too steep for surface	0.08
	 	 	application Filtering capacity	0.01
Spoonerhill, stony	 Very limited Restricted permeability	 1.00 	 Very limited Depth to saturated zone	0.99
	Depth to saturated zone 	0.99 	Too acid Restricted permeability	0.31 0.21
	 	 	Too steep for surface application	0.08
	 	 	Filtering capacity 	0.01
Cress	Very limited Restricted permeability	1.00	 Very limited Filtering capacity	1.00
1653C:	 		Too acid 	0.31
Stanberry	 Very limited Restricted permeability	1.00	 Very limited Filtering capacity	1.00
	Slope Depth to saturated zone	1.00	Too steep for surface application	1.00
	Saturated zone		Depth to saturated zone	0.99
	 	 	Too steep for sprinkler application	0.50
	 - -	 	Restricted permeability 	0.21

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
	l	I		1
1653C:				
Parkfalls	: -	1	Very limited	
	Restricted	1.00		1.00
	permeability	1 00	saturated zone Too acid	0.77
	Depth to saturated zone	1.00	Restricted	0.77
	Sacuraced Zone	i	permeability	0.21
	 		permeability	i
Wozny	 Very limited	i	 Very limited	i
-	Depth to	1.00	: -	1.00
	saturated zone	į	saturated zone	İ
	Restricted	1.00	Ponding	1.00
	permeability		Too acid	0.31
	Ponding	1.00	Filtering	0.01
		!	capacity	!
				!
2015:	Not mated		 Not rated	1
Pits	Not rated		Not rated	1
2050:	 		 	i
Landfill	Not rated	i	 Not rated	i
		i		i
3011A:	İ	į	İ	İ
Barronett	Very limited		Very limited	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00		1.00
	saturated zone		Too acid	0.31
	Ponding	1.00	!	0.21
	 -		permeability	
3125A:	 	1	 	1
Meehan	 Verv limited		 Very limited	i
	Depth to	1.00	: -	1.00
	saturated zone	i	capacity	i
	İ	į	Depth to	1.00
			saturated zone	
		1	Too acid	0.85
		!		!
3126A:				
Wurtsmith			Very limited Filtering	1 00
	Depth to saturated zone	1.00	!	1.00
	Too acid	0.03	capacity Too acid	1.00
	100 4014		Depth to	0.99
		i	saturated zone	
	İ	į	į	į
			I	1
3276A:	İ			1
3276A: Au Gres	 Very limited		 Very limited	İ
	Depth to	1.00	Filtering	1.00
	Depth to saturated zone	1.00	Filtering capacity	į
	Depth to	1	Filtering capacity	 1.00 1.00

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatment of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3312B:	 			
Glendenning, very		i		i
stony	Very limited	i	Very limited	i
_	Restricted	1.00	Depth to	1.00
	permeability	İ	saturated zone	İ
	Depth to	1.00	Too acid	0.31
	saturated zone		Restricted	0.21
			permeability	
Glendenning	 Very limited		 Very limited	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	0.31
	saturated zone		Restricted	0.21
	 		permeability	
3336A:		į		į
Fenander	Very limited		Very limited	
	Restricted	1.00	Depth to	1.00
	permeability	1 00	saturated zone	1 00
	Depth to saturated zone	1.00	Ponding Restricted	1.00
	Ponding	1.00	permeability	
3403A:	 			
Loxley	 Very limited	i	 Very limited	
-	Depth to	1.00	Filtering	1.00
	saturated zone	İ	capacity	İ
	Ponding	1.00	Depth to	1.00
	Too acid	0.77	saturated zone	
	Restricted	0.69	Too acid	1.00
	permeability		Ponding	1.00
Beseman	 Very limited		 Very limited	
	Restricted	1.00	Depth to	1.00
	permeability		saturated zone	
	Depth to	1.00	Too acid	1.00
	saturated zone		Ponding	1.00
	Ponding 	1.00	Restricted permeability	0.21
_		į		į
Dawson	Very limited		Very limited	
	Depth to	1.00	Filtering	1.00
	saturated zone	1 00	capacity	1 00
	Restricted	1.00	Depth to saturated zone	1.00
	permeability Ponding	1.00	saturated zone Too acid	1.00
	Too acid	0.77	Ponding	1.00
	100 acid		Low adsorption	0.01
	I .	1		10101

Table 22a.--Agricultural Waste Management--Continued

Map symbol and soil name	Rapid infiltrati		Slow rate treatm of wastewater	
	Rating class and limiting features	Value	Rating class and limiting features	Value
3424C: Frogcreek	 Very limited Restricted permeability Depth to saturated zone Slope	 1.00 1.00 1.00 	Very limited Depth to saturated zone Too steep for surface application Too acid Too steep for sprinkler application Restricted permeability	 1.00 1.00 0.31 0.22
Magroc	 Very limited Depth to saturated zone Depth to bedrock Restricted permeability	1.00	 Very limited Depth to saturated zone Depth to bedrock Too acid	 1.00 0.42 0.31
Stinnett		 1.00 1.00 	Very limited Depth to saturated zone Too acid Restricted permeability	 1.00 0.31 0.21
Rock outcrop	 Not rated		 Not rated	
3446A: Newson	 Very limited Depth to saturated zone Ponding Too acid	 1.00 1.00 0.07	 Very limited Filtering capacity Depth to saturated zone Too acid Ponding	 1.00 1.00 1.00
3448B: Grettum	 Very limited Depth to saturated zone	 1.00 	 Very limited Filtering capacity Too acid	 1.00 0.85
3448C: Grettum	 Very limited Depth to saturated zone Slope 	 1.00 1.00 	Very limited Filtering capacity Too steep for surface application Too acid Too steep for sprinkler application	 1.00 1.00 1.00 0.85 0.50

Table 22a.--Agricultural Waste Management--Continued

Map symbol	Rapid infiltrati		Slow rate treatment	
and soil name	of wastewater		of wastewater	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	<u> </u>
3516A:				
Slimlake	Very limited	į į	Very limited	i
	Depth to	1.00	Filtering	1.00
	saturated zone	İ	capacity	İ
	Restricted	0.31	Depth to	0.86
	permeability		saturated zone	
			Too acid	0.42
3629B:				
Perida	Very limited	İ	Very limited	İ
	Restricted	1.00	Filtering	1.00
	permeability		capacity	
	Depth to	0.09	Restricted	1.00
	saturated zone		permeability	
			Too acid	0.85
			Depth to	0.09
			saturated zone	
M-W:				
Miscellaneous water	Not rated	į	Not rated	į
Ñ:	 	 	 	
Water	Not rated	İ	Not rated	İ

Table 22b.--Agricultural Waste Management

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. "Not rated" indicates that data are not available or that no rating is applicable. See text for further explanation of ratings in this table)

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludge	
	processing wast			
	Rating class and	Value	Rating class and	Value
	limiting features	i	limiting features	i
		Ī		Ī
3A:				
Totagatic	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
Bowstring	 Very limited		 Very limited	
Dombering	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	i
	Flooding	1.00	Flooding	1.00
	Low adsorption	1.00	Low adsorption	1.00
	Ponding	1.00	Ponding	1.00
Ausable	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	!	saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
22A:	 		 	
Comstock	 Very limited		 Very limited	
001110	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability	İ	Restricted	0.31
	Too acid	0.08	permeability	i
	İ	ĺ		Ì
24A:				
Poskin	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	!	saturated zone	
	Too acid	0.08	Too acid	0.31
0.53				
27A: Scott Lake	 Very limited	I	 Very limited	1
DCOLL Have	Filtering	1.00	Very limited Filtering	1.00
	capacity	1	capacity	1
	Depth to	0.86	Depth to	0.86
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
	,			
	Droughty	0.05	Droughty	0.05

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	e
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
28B:				
Haugen, very stony	-	:	Very limited	
	Depth to saturated zone	0.99	Depth to saturated zone	0.99
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too stony	0.50	permeability	
	Too acid	0.32		į
Haugen	 Very limited		 Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability	
Rosholt, very stony	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.40
	Too stony Droughty	0.50	Too acid	0.31
	Too acid	0.08		
Rosholt	 Very limited		 Very limited	
RODHOTC	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	 	
28C:				
Haugen, very stony	-		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone Restricted		saturated zone Too acid	
	permeability	0.89	Restricted	0.91
	Too stony	0.50	permeability	0.70
	Too acid	0.32	Slope	0.04
	Slope	0.04	-	į
Haugen	 Very limited		 Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability Slope	0.04
Rosholt, very stony	 Very limited		 Very limited	
MOSHOIC, VELY SCORY	Filtering	1.00	Very limited Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.40
				'
	Too stony	0.50	Too acid	0.31
	Too stony Droughty	0.50 0.40	Too acid Slope	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludge	
	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	<u>i</u>
000			1	
28C: Rosholt	 Very limited	l i	 Very limited	l I
ROBIIOIC	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		
225				
33B: Chetek	 Very limited		 Very limited	l I
cheter	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Droughty	0.94	Droughty	0.94
	Too acid	0.02	Too acid	0.07
	İ	į		İ
33C:				
Chetek	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.94	Droughty	0.94
	Slope Too acid	0.04	Too acid	0.07
	100 acid	0.02	Slope	0.04
38A:	 	l		i
Rosholt	 Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	ĺ	capacity	İ
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08		
38B:	 		 	
Rosholt	 Very limited		 Very limited	l
ROBIIOTO	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08		
		ļ		
38C: Rosholt				
ROSHOIT	Filtering	1.00	Very limited Filtering	1.00
	capacity	1	capacity	1
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		į
38D:		ļ		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Dense layer	1.00	capacity Slope	1.00
	Slope	1.00	Slope Droughty	0.33
	Droughty	0.33	Too acid	0.33
	Too acid	0.08		

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	:		 Pation alone and	177-1
	Rating class and limiting features	Value	Rating class and limiting features	Value
42D: Amery	 Very limited		 Very limited	
	Slope	1.00	Slope	1.00
	Too stony	0.50	Too acid	0.77
	Restricted	0.41	Restricted	0.31
	permeability Too acid	0.22	permeability	
43B: Antigo	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
43C:				
Antigo	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	0.37	Slope	0.37
	Too acid	0.08	Too acid	0.31
43D:	 	į		į
Antigo	Very limited	1.00	Very limited Filtering	1.00
	Slope Filtering	1.00	capacity	1
	capacity		Slope	1.00
	Too acid	0.08	Too acid	0.31
48A:				
Brill	Very limited	İ	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid 	0.31
63A:	 		 Vorus limited	
Crystal Lake	Depth to	0.99	Very limited Depth to	0.99
	saturated zone	0.55	saturated zone	0.55
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability	į
63B:				
Crystal Lake	-		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability Too acid	0.08	Restricted permeability	0.31
63C:	 		[[
Crystal Lake	Very limited	i	 Very limited	İ
-	Depth to	0.99	Depth to	0.99
	saturated zone	į	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability Slope	0.04

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	re
	processing wast	e		
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	
63E:	 		 	
Crystal Lake	 Very limited	i	 Very limited	
-	Slope	1.00	Slope	1.00
	Depth to	0.86	Depth to	0.86
	saturated zone	ĺ	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.31
	Too acid	0.08	permeability	
64A:	 		 	
Totagatic	Very limited	į	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
Winterfield	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	Ì
	Flooding	1.00	Flooding	1.00
	Leaching	0.90	Droughty	0.52
	Droughty	0.52		
69B:	 		 	
Keweenaw	Somewhat limited	İ	Somewhat limited	Ì
	Too acid	0.22	Too acid	0.77
	Filtering	0.01	Filtering	0.01
	capacity		capacity	
Sayner	 Very limited	 	 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22		į
Vilas	 Verv limited		 Very limited	
1111	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Droughty	0.04
	Droughty	0.04		
69C:	 		 	
Keweenaw	 Somewhat limited		 Somewhat limited	
	Too acid	0.22	Too acid	0.77
	Slope	0.16	Slope	0.16
	Filtering	0.01	Filtering	0.01
	capacity	İ	capacity	İ

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	e
	:		<u> </u>	1
	Rating class and limiting features	Value	Rating class and limiting features	Value
		İ		İ
69C: Sayner	 		 	
Sayner	Filtering	1.00	Very limited Filtering	1.00
	capacity		capacity	
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22	Slope	0.16
	Slope	0.16	 	
Vilas	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.31
	Slope	0.16	Slope	0.16
	Too acid	0.08	Droughty	0.04
	Droughty 	0.04		
69E:				İ
Keweenaw	Very limited	1.00	Very limited Slope	1.00
	Slope Too acid	0.22	Slope Too acid	0.77
	Filtering	0.01	Filtering	0.01
	capacity		capacity	
Sayner	 Very limited		 Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	İ
	capacity	ĺ	Slope	1.00
	Droughty	0.99	Droughty	0.99
	Leaching	0.45	Too acid	0.77
	Too acid	0.22	 	
Vilas	Very limited	İ	 Very limited	İ
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Leaching Too acid	0.45	Too acid	0.31
	Droughty	0.04	Droughty 	
74B:			 	
	 Very limited	İ	 Very limited	
1111	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	 	
74C:			 	
Vilas	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Slope	0.37
	Slope Too acid	0.37	Too acid	0.31
	100 acid	10.08	Droughty	0.04
	Droughty	0.04	1	1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	e
una 2011 mamo	processing wast		01 50 00 51 00	•
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
	ĺ	İ		İ
74D:	İ	ĺ		ĺ
Vilas	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Leaching	0.45	Too acid	0.31
	Too acid Droughty	0.08	Droughty	0.04
	Dioughty	0.01	 	
100B:	 	i		i
Menahga	 Very limited	i	 Very limited	i
3.	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	0.77	Too acid	0.99
	Too acid	0.50	Droughty	0.77
	Leaching	0.45		
100C:				
Menahga	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Too acid		capacity	1 00
	Leaching	0.50	Low adsorption Too acid	1.00
	Droughty	0.40	Droughty	0.40
	Slope	0.04	Slope	0.04
100D:		i		i
Menahga	Very limited	ĺ	Very limited	ĺ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Low adsorption	1.00
	Too acid	0.50	Slope	1.00
	Leaching	0.45	Too acid	0.99
	Droughty	0.40	Droughty	0.40
127D:	 		 	l I
Amery	 Very limited	i	 Very limited	i i
12027	Slope	1.00	Slope	1.00
	Too stony	0.50	Too acid	0.77
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.22		
Rosholt	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	11 00	capacity	1 00
	Dense layer Slope	1.00	Slope Droughty	1.00
	Too stony	0.50	Too acid	0.31
	Droughty	0.40	100 0010	
127E:	İ	İ		İ
	 Very limited	İ	 Very limited	İ
=	Slope	1.00	Slope	1.00
	Too stony	0.50	Too acid	0.77
	Dogtmigted	0.41	Restricted	0.31
	Restricted			
	Restricted permeability Too acid	0.22	permeability	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	_	Application of sewage sludg	e
	processing wast			
	Rating class and	Value	Rating class and	Value
	limiting features	<u>i </u>	limiting features	<u>i</u>
		!		
127E:	 		 	
Rosholt	Very limited Slope	1.00	Very limited Filtering	1.00
	Filtering	1.00	capacity	1.00
	capacity		Slope	1.00
	Dense layer	1.00	Droughty	0.40
	Too stony	0.50	Too acid	0.31
	Droughty	0.40		!
156B:	 -		 -	
Magnor, very stony	 Verv limited	 	 Very limited	
114911017 1017 200117	Depth to	1.00	Depth to	1.00
	saturated zone	i	saturated zone	
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too stony	0.50		
	Too acid	0.27		
Magnor	 Very limited	l I	 Very limited	
Magnor	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability	ĺ	permeability	İ
	Too acid	0.27		
157B:	 -		 -	
Freeon, very stony	 Verv limited	1	 Very limited	
rrecon, very beony	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.77
	Restricted	0.74	Restricted	0.60
	permeability		permeability	
	Too stony	0.50		
	Too acid	0.22		
Freeon	 Very limited	l I	 Very limited	
1100011	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability	į	permeability	į
	Too acid	0.27		
157C: Freeon, very stony	 Vorm limited		 Very limited	
riscon, very scony	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.77
	Restricted	0.74	Restricted	0.60
	permeability	į	permeability	
	!	0.50	permeability Slope	0.04

Table 22b.--Agricultural Waste Management--Continued

Rating class and Value Rating class and Imiting features	Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	re
1		:		 	1 ** - 3
Very limited Depth to 1.00 Depth to 1.00 Saturated zone Dense layer 1.00 Too acid 0.85 Restricted 0.74 Restricted 0.60 Depth to 0.85 Restricted 0.74 Restricted 0.60 Depmeability Too acid 0.27 Slope 0.04			value		value
Very limited Depth to 1.00 Depth to 1.00 Saturated zone Dense layer 1.00 Too acid 0.85 Restricted 0.74 Restricted 0.60 Depth to 0.85 Restricted 0.74 Restricted 0.60 Depth to 0.74 Restricted 0.60 Depth to 0.04		İ	İ		İ
Depth to saturated zone Dense layer 1.00 saturated zone Dense layer 1.00 Too acid 0.85 Restricted 0.74 Restricted 0.60 permeability Depth to acid 0.60 Dense layer 1.00 Too acid 0.85 Dense layer 1.00 Too acid 0.60 Dense layer 1.00 Depmeability Depth to acid 0.27 Slope 0.04 Dense layer 1.00 Depth to D			ļ		
Saturated zone Dense layer 1.00 Too acid 0.85 Restricted 0.74 Restricted 0.60 permeability Dense layer 0.04 permeability Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.04 Dense layer 0.05 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.06 Dense layer 0.07 Dense l	Freeon	: -	1 00	_	1 00
Dense layer 1.00 Too acid 0.85 Restricted 0.74 Restricted 0.60 permeability Too acid 0.27 Slope 0.04 Slope 0.06 Slope 0.06 Slope 0.06 Slope 0.06 Slope 0.07 Slope 0.07 Slope 0.07 Slope 0.07 Slope 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.00 Slope 0.37 Slope 0.37 Slope 0.37 Slope 0.37 Slope 0.37 Slope 0.37 Slope 0.37 Too acid 0.31 Droughty 0.04 Droughty 0.06 Droughty 0.07 Droughty 0.08 Droughty 0.09 Drough			1	-	1
Restricted 0.74 Restricted 0.60 permeability Too acid 0.27 Slope 0.04		1	1.00	'	0.85
Too acid 0.27 Slope 0.04				1	
Slope		permeability	į	permeability	İ
160A:		Too acid	0.27	Slope	0.04
Very limited Very limited Filtering 1.00 Filtering 1.00 capacity Depth to 1.00 Depth to 1.00 Saturated zone Saturated zone Saturated zone Droughty		Slope	0.04		
Very limited Very limited Filtering 1.00 Filtering 1.00 capacity Depth to 1.00 Depth to 1.00 Saturated zone Saturated zone Saturated zone Droughty	1604.	 		 	
Capacity Depth to 1.00 Depth to 1.00 Saturated zone Too acid 0.22 Too acid 0.77 Droughty 0.09 Droughty 0.09 Droughty 0.09 Droughty 0.09 182B:		 Very limited	i	 Very limited	
Depth to saturated zone Saturated zone Too acid 0.22 Too acid 0.77		Filtering	1.00	Filtering	1.00
Saturated zone		capacity		capacity	
Too acid		: -	1.00		1.00
Droughty 0.09 Droughty 0.09 182B: Padus		1		1	
Padus				1	
Padus		Droughty	0.09	Droughty 	0.09
Filtering 1.00 Filtering 1.00 capacity capacity Too acid 0.08 Too acid 0.31	182B:		i		1
Capacity Capacity Too acid 0.08 Too acid 0.31 182C:	Padus	Very limited	ĺ	Very limited	İ
Too acid		Filtering	1.00	Filtering	1.00
Nery limited Nery limited Nery limited					
Padus		Too acid	0.08	Too acid	0.31
Padus	182C:	 		 	
capacity capacity	Padus	Very limited	i	 Very limited	i
Slope		Filtering	1.00	Filtering	1.00
Too acid		capacity		capacity	
192A:		Slope	0.37	Slope	0.37
Worcester		Too acid	0.08	Too acid	0.31
Worcester	192A:	 		 	
capacity capacity 1.00 Depth to 1.00 saturated zone saturated zone Too acid 0.08 Too acid 0.31 Droughty 0.04 Droughty 0.04 193A:		 Very limited	i	 Very limited	İ
Depth to 1.00 Depth to 1.00 saturated zone saturated zone saturated zone Too acid 0.08 Too acid 0.31 Droughty 0.04 Droughty 0.04 Droughty 0.04		Filtering	1.00	Filtering	1.00
Saturated zone		capacity		capacity	
Too acid		: -	1.00	-	1.00
Droughty 0.04 Droughty 0.04 193A:		1		1	
193A: Minocqua				1	
Minocqua		Droughty	0.04	Droughty 	0.04
Filtering 1.00 Filtering 1.00 capacity capacity capacity l.00	193A:		i		i
capacity capacity	Minocqua	Very limited		Very limited	
Depth to		-	1.00		1.00
saturated zone saturated zone Ponding 1.00 Low adsorption 1.00 Leaching 0.70 Ponding 1.00 Too acid 0.02 Too acid 0.07 215B: Pence					
Ponding			1.00		1.00
Leaching 0.70 Ponding 1.00 Too acid 0.02 Too acid 0.07				'	
Too acid				-	1
			1		
Pence		j			
Filtering 1.00 Filtering 1.00 capacity capacity Dense layer 1.00 Droughty 0.74 Droughty 0.31					
capacity capacity Dense layer 1.00 Droughty 0.74 Droughty 0.74 Too acid 0.31	rence		11 00		1 00
Dense layer		-	1 .00		1 . 00
Droughty 0.74 Too acid 0.31			1 00		0 74
			1		
		İ			į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	е
	processing wast		<u> </u>	
	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>		
215C:	İ	į		į
Pence	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Slope	0.37
	Slope	0.37	Too acid	0.31
	Too acid	0.08]	
215D:	 	l I		
Pence	 Very limited		 Very limited	i
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	i
	capacity	i	Slope	1.00
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too acid	0.08		
315A:		ļ		ļ
Rib	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity	11 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1 00	saturated zone Ponding	1.00
	Leaching	1.00 0.70	Too acid	0.31
	Too acid	0.08	100 acia	0.51
			 	i
337A:		į		į
Plover	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	0.89	Restricted	0.78
	permeability	!	permeability	
	Too acid	0.08	Too acid	0.31
368B:		l I	 	l I
Mahtomedi	 Verv limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	1.00	Droughty	1.00
		i	man and a	0.42
	Leaching	0.45	Too acid	0.42
	Leaching Too acid	0.45 0.11	Too acid	
	Too acid	0.11		
Cress	Too acid	0.11	 Very limited	
Cress	Too acid Very limited Filtering	0.11	 Very limited Filtering	
Cress	Too acid Very limited Filtering capacity	0.11	 Very limited Filtering capacity	 1.00
Cress	Too acid Very limited Filtering capacity Droughty	0.11 1.00 0.60	 Very limited Filtering capacity Droughty	 1.00 0.60
Cress	Too acid Very limited Filtering capacity Droughty Leaching	0.11 1.00 0.60 0.45	 Very limited Filtering capacity	 1.00
Cress	Too acid Very limited Filtering capacity Droughty	0.11 1.00 0.60	 Very limited Filtering capacity Droughty	 1.00 0.60
Cress	Too acid Very limited Filtering capacity Droughty Leaching	0.11 1.00 0.60 0.45	 Very limited Filtering capacity Droughty	 1.00 0.60
	Too acid Very limited Filtering capacity Droughty Leaching	0.11 1.00 0.60 0.45	 Very limited Filtering capacity Droughty	 1.00 0.60
368C:	Too acid Very limited Filtering capacity Droughty Leaching Too acid	0.11 1.00 0.60 0.45	Very limited Filtering capacity Droughty Too acid	 1.00 0.60
368C:	Too acid Very limited Filtering capacity Droughty Leaching Too acid	0.11 1.00 0.60 0.45 0.08	Very limited Filtering capacity Droughty Too acid	 1.00 0.60 0.31
368C:	Too acid Very limited Filtering capacity Droughty Leaching Too acid Very limited Filtering	0.11 1.00 0.60 0.45 0.08	 Very limited Filtering capacity Droughty Too acid Very limited Filtering	 1.00 0.60 0.31
368C:	Too acid Very limited Filtering capacity Droughty Leaching Too acid Very limited Filtering capacity	0.11 	Very limited Filtering capacity Droughty Too acid Very limited Filtering capacity	 1.00 0.60 0.31
368C:	Too acid Very limited Filtering capacity Droughty Leaching Too acid Very limited Filtering capacity Droughty	0.11 1.00 0.60 0.45 0.08 1.00	Very limited Filtering capacity Droughty Too acid Very limited Filtering capacity Droughty	 1.00 0.60 0.31 1.00 1.00

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food	-	of sewage sludg	е
	processing wast	е		
	Rating class and	Value		Value
	limiting features		limiting features	
		ļ		ļ
368C:				
Cress	Very limited Filtering	1.00	Very limited Filtering	1 00
	capacity	1	capacity	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		į
368D:				
Mahtomedi	: -		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	1.00	Droughty Too acid	1.00
	Leaching Too acid	0.45	Too acid	0.42
	100 acid	0.11	 	
Cress	 Very limited	i	 Very limited	i
01000	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
371A:		ļ		ļ
Croswell	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	0.99	capacity Depth to	0.99
	saturated zone	10.33	saturated zone	0.33
	Droughty	0.67	Droughty	0.67
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		i
	İ	į		į
380B:	İ	ĺ		İ
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	 	1
Rosholt	 Very limited		 Very limited	
RODIIO10	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08		
380C:	[ļ		!
Cress	: -		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid			
	Too acid	0.04	Siope	0.01

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast		<u> </u>	
	Rating class and	Value	Rating class and	Value
	limiting features	<u> </u>	limiting features	1
380C:	 	1]	
	 Very limited	1	 Very limited	
NOBIIGIE	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.33
	Droughty	0.33	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		İ
		ĺ		İ
380D:				
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		!
		ļ		
Rosholt	Very limited	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity Slope	1 00
	Dense layer Slope	1.00 1.00	Slope Droughty	1.00
	Droughty	0.33	Too acid	0.33
	Too acid	0.08	100 acid	0.31
	100 4014			
383B:		i	 	
	 Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	0.42
	Too acid	0.11		
383C:		!		
Mahtomedi	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty Leaching	1.00	Droughty Too acid	1.00
	Too acid	0.45	Slope	0.42
	Slope	0.04	biope	0.04
	blope		 	
383D:		i	 	
Mahtomedi	 Verv limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Slope	1.00	Slope	1.00
	Droughty	1.00	Droughty	1.00
	Leaching	0.45	Too acid	0.42
	Too acid	0.11		
396B:	[!		
Friendship			Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.90	Droughty	0.90
		i a -	l maria de 1.5	10
	Leaching Too acid	0.45	Too acid	0.21

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	e
	·		 Dation	177-1
	Rating class and limiting features	Value	Rating class and limiting features	Value
	İ	İ	İ	i i
396B:	!	ļ	!	
Wurtsmith	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity Too acid	1 00
	Depth to saturated zone	0.99	Depth to	1.00
	Droughty	0.87	saturated zone	0.33
	Too acid	0.78	Droughty	0.87
	Leaching	0.45		
Grayling	 Very limited		 Very limited	
-	Filtering	1.00	Filtering	1.00
	capacity	ĺ	capacity	İ
	Droughty	1.00	Too acid	1.00
	Too acid	0.78	Droughty	1.00
	Leaching 	0.45	 	
397A:		į		į
Perchlake	Very limited		Very limited	
	Filtering	1.00	Filtering capacity	1.00
	capacity Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Droughty	0.25	Too acid	0.77
	Too acid	0.22	Droughty	0.25
399B:	 		 	
Grayling	Very limited	ĺ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	1.00	Too acid	1.00
	Too acid	0.78	Droughty	1.00
	Leaching 	0.45	 	
399C: Grayling	 Very limited		 Very limited	
Graying	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	1.00	Too acid	1.00
	Too acid	0.78	Droughty	1.00
	Leaching	0.45	Slope	0.04
	Slope	0.04	 	
399D:				
Grayling	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	11 00	capacity	1 00
	Slope Droughty	1.00	Too acid	1.00
	Droughty Too acid	1.00 0.78	Slope Droughty	1.00
	Leaching	0.75	Stoughty	
405A:	•	i	 Very limited	i
405A: Lupton	Very limited			
	Depth to	1.00	Depth to	1.00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Depth to	1.00 1.00 0.90	Depth to	1.00 1.00 1.00

Table 22b.--Agricultural Waste Management--Continued

		Application of sewage sludg	e
!			
' 		Rating class and	Value
limiting features		limiting features	
ĺ	İ		İ
	ĺ		İ
Very limited		Very limited	
Depth to	1.00	Depth to	1.00
saturated zone		saturated zone	
	!		1.00
	:		1.00
Too acid	0.02	Too acid	0.07
 Very limited	1	 Very limited	
-	1 00		1.00
	1.00		1.00
saturated zone	i	saturated zone	
Ponding	1.00	Low adsorption	1.00
Leaching	0.90	Ponding	1.00
	ĺ		İ
Very limited			
	1.00	Filtering	1.00
	1.00	· -	1.00
!		1	
	!		1.00
!	!	!	1.00
Heaching	0.30	Foliating	1
			i
Very limited	į	Very limited	İ
Depth to	1.00	Depth to	1.00
saturated zone		saturated zone	
Ponding	1.00	Low adsorption	1.00
Leaching	0.90	Ponding	1.00
Too acid	0.08	Too acid	0.31
: -	1 00		1.00
	1	!	1
	1.00		1.00
		: -	
Ponding	1.00	Low adsorption	1.00
Leaching	0.90	Ponding	1.00
	ĺ		İ
Very limited		Very limited	
Depth to	1.00	: -	1.00
!		!	
	:	· -	1.00
	:		1.00
TOO acid	0.08	Too acid	0.31
 Verv limited		 Verv limited	
Depth to	1.00	Depth to	1.00
	1	saturated zone	1
saturated zone		Saturated Zone	1
saturated zone Ponding	1.00	Low adsorption	1.00
!	 1.00 0.90	!	1.00
	manure and food processing wast Rating class and limiting features Very limited Depth to saturated zone Ponding Leaching Too acid Very limited Filtering capacity Depth to saturated zone Ponding Leaching Very limited Filtering capacity Depth to saturated zone Ponding Leaching Very limited Filtering capacity Depth to saturated zone Ponding Too acid Leaching Very limited Depth to saturated zone Ponding Leaching Too acid Very limited Filtering capacity Depth to saturated zone Ponding Leaching Capacity Depth to saturated zone Ponding Leaching Leaching Very limited Depth to saturated zone Ponding Leaching Too acid Very limited Depth to saturated zone Ponding Leaching Too acid Very limited	Very limited Depth to 1.00 saturated zone Ponding 1.00 capacity Depth to 1.00 saturated zone Ponding 1.00 capacity Depth to 1.00 saturated zone Ponding 1.00 capacity Depth to 1.00 saturated zone Ponding 1.00 capacity Depth to 1.00 saturated zone Ponding 1.00 capacity Depth to 1.00 saturated zone Ponding 1.00 Too acid 0.94 Leaching 0.90	manure and food- processing waste Rating class and Value Rating class and limiting features

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludg	е
	processing wast			1
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	1
412A:	 	i i		1
Rifle	 Very limited	İ	 Very limited	i
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	İ
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Filtering	0.01	Filtering	0.01
	capacity		capacity	
Tacoosh	 Very limited		 Very limited	
1400001	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
				!
415A:				
Greenwood	Very limited	1 00	Very limited Depth to	1 00
	Depth to saturated zone	1.00	saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	İ			İ
439B:				!
Graycalm	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Too acid	0.50	capacity Too acid	0.99
	Leaching	0.45	Droughty	0.25
	Droughty	0.25		
		İ		i
Menahga	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.50	Low adsorption	1.00
	Leaching Droughty	0.45 0.39	Too acid Droughty	0.99
	Dioughty	0.39	Dioughty	0.33
439C:		İ		i
Graycalm	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.50	Too acid	0.99
	Leaching	0.45	Droughty	0.25
	Droughty Slope	0.25	Slope	0.04
	Slope	0.04	 	
Menahga	 Very limited	i	 Very limited	i
-	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Too acid	0.50	Low adsorption	1.00
	Leaching	0.45	Too acid	0.99
	Droughty	0.39	Droughty	0.39
	Slope	0.04	Slope	0.04
	l	I	I	I

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	е
	processing wast			
	Rating class and	Value		Value
	limiting features		limiting features	1
4200	1			
439D:	 			
Graycalm	Very limited	1 00	Very limited	1 00
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity	1 00
	Slope Too acid	1.00	Slope	1.00
		0.50	Too acid	0.99
	Leaching	0.45	Droughty	0.25
	Droughty	0.25	<u> </u>	
Monohan	 Tom: limited	 	 Town limited	
Menahga	Very limited Filtering	1.00	Very limited Filtering	1.00
		1	_	1
	capacity	1.00	capacity Low adsorption	1 00
	Slope Too acid	0.50	-	1.00
	Leaching	0.45	Slope Too acid	0.99
	Droughty	0.39	Droughty	0.39
	Droughty	0.39	Droughty	10.33
441C:	1	 	 	
Freeon	 Very limited	 	 Very limited	
rieeon	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1
	Dense layer	1.00	Too acid	0.85
	Restricted	0.74	Restricted	0.60
	permeability	0.74	permeability	10.00
	Too stony	0.50	Slope	0.37
	Slope	0.37	Siope	0.37
	Blobe	0.37	 	
Cathro	 Very limited	 	 Very limited	
Cucinio	Depth to	1.00	Depth to	1.00
	saturated zone	1	saturated zone	1
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.90	Ponding	1.00
	Too acid	0.02	Too acid	0.07
	100 actu	0.02	100 acia	0.07
442C:	I I	 		
Haugen	 Very limited	İ	 Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	10000
		1	Datalate Lond	1
	Restricted	0.89	Too acid	0.91
	Restricted permeability	0.89	Too acid	0.91
	permeability	İ	Restricted	 0.91 0.78
		0.50	!	1
	permeability Too stony	İ	Restricted	1
Greenwood	permeability Too stony Too acid	0.50	Restricted permeability	1
Greenwood	permeability Too stony Too acid Very limited	0.50	Restricted permeability Very limited	0.78
Greenwood	permeability Too stony Too acid Very limited Filtering	0.50	Restricted permeability Very limited Filtering	1
Greenwood	permeability Too stony Too acid Very limited Filtering capacity	0.50	Restricted permeability Very limited Filtering capacity	0.78
Greenwood	permeability Too stony Too acid Very limited Filtering	 0.50 0.32 1.00	Restricted permeability Very limited Filtering	0.78
Greenwood	permeability Too stony Too acid Very limited Filtering capacity Depth to	 0.50 0.32 1.00	Restricted permeability Very limited Filtering capacity Depth to	0.78
Greenwood	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone	 0.50 0.32 1.00 	Restricted permeability Very limited Filtering capacity Depth to saturated zone	0.78 1.00 1.00
Greenwood	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding	 0.50 0.32 1.00 1.00	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption	0.78 1.00 1.00
Greenwood	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid	 0.50 0.32 1.00 1.00 1.00 0.94	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid	0.78 1.00 1.00 1.00
Greenwood	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid	 0.50 0.32 1.00 1.00 1.00 0.94	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid	0.78 1.00 1.00 1.00
	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid	 0.50 0.32 1.00 1.00 1.00 0.94	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid	0.78 1.00 1.00 1.00
443D:	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid Leaching	 0.50 0.32 1.00 1.00 1.00 0.94	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding	0.78 1.00 1.00 1.00
443D:	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid Leaching Very limited	0.50 0.32	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited	0.78
443D:	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid Leaching Very limited Slope	 0.50 0.32 1.00 1.00 0.94 0.90 	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited Slope	0.78
443D:	permeability Too stony Too acid Very limited Filtering capacity Depth to saturated zone Ponding Too acid Leaching Very limited Slope Too stony	0.50 0.32	Restricted permeability Very limited Filtering capacity Depth to saturated zone Low adsorption Too acid Ponding Very limited Slope Too acid	0.78

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	Application of sewage sludg	e
	Rating class and	 Value	Rating class and	Value
	limiting features	varue	limiting features	varue
	Ī	İ		İ
443D:				
Greenwood	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
464.5		ļ		
461A: Bowstring	 Very limited		 Very limited	
BOWS CITING	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	į	saturated zone	İ
	Flooding	1.00	Flooding	1.00
	Low adsorption	1.00	Low adsorption	1.00
	Ponding	1.00	Ponding	1.00
484A:	 		 	
Greenwood	 Very limited		 Very limited	1
or commodu	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	ĺ	saturated zone	İ
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
Beseman	 Very limited		 Very limited	
Debeman	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
495B:	 	i	 	
Karlsborg	 Very limited	į	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Restricted	1.00
	permeability Runoff	0.40	permeability Too acid	0.77
	Too acid	0.22	100 acid	0.77
				i
Grettum	 Very limited	İ	 Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity	ļ	capacity	
	Leaching	0.45	Too acid	0.85
	Too acid	0.27	Droughty	0.02
	Droughty			

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	e
	processing wast			
	Rating class and limiting features	Value	Rating class and limiting features	Value
495B:				
Perida	 Very limited	1	 Very limited	l
rerida	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability	į	permeability	İ
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone		saturated zone	
495C:	 		 	
Karlsborg	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Runoff	0.40	Too acid	0.77
	Too acid	0.22	Slope 	0.04
Grettum	Very limited	į	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Leaching	0.45	Too acid	0.85
	Too acid	0.27	Slope	0.04
	Slope	0.04	Droughty	0.02
	Droughty 	0.02	 	
Perida	 Very limited	İ	 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone		saturated zone	
	Slope 	0.04	Slope 	0.04
495D:		İ		
Karlsborg	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Slope	1.00	Slope	1.00
	Runoff	0.40	Too acid	0.77
Grettum	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.85
		0.27	Dwarehter	0.02
	Too acid	0.27	Droughty	0.02

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		 Application of sewage sludg	·e
una 2011 mamo	processing wast		02 20 0 0 2 2 0 0 0	
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
		İ	ĺ	Ì
495D:	j	į	İ	į
Perida	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Slope	1.00	Slope	1.00
	Too acid	0.27	Too acid	0.85
	Depth to	0.09	Depth to	0.09
	saturated zone	1	saturated zone	-
4053		1		-
497A: Meenon	 Town limited	1	 Town limited	1
meenon	Very limited Filtering	1.00	Very limited Filtering	1.00
	capacity	1	capacity	1
	Restricted	1.00	Restricted	1.00
	permeability		permeability	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
	Droughty	0.03	Droughty	0.03
	i	i	İ	i
515A:	j	į	İ	į
Manitowish	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Depth to	0.86
	Depth to	0.86	saturated zone	
	saturated zone		Droughty	0.63
	Droughty	0.63	Too acid	0.31
	Too acid	0.08		
		!		!
521A:				
Dody	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	1.00	capacity Depth to	1.00
	saturated zone	1	saturated zone	1
	Restricted	1.00	Low adsorption	1.00
	permeability		Restricted	1.00
	Ponding	1.00	permeability	
	Leaching	0.50	Ponding	1.00
	į	i	İ	i
524E:	İ	i	İ	İ
Rock outcrop	Not rated	į	Not rated	į
		İ		İ
Frogcreek	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	1
	permeability	[!	1
	Too acid	0.08	!	1
		[!	1
		1	Very limited	1
Metonga	Very limited	1	: -	1.
Metonga	Slope	1.00	Low adsorption	1.00
Metonga	Slope Too stony	0.47	Low adsorption Slope	1.00
Metonga	Slope Too stony Depth to bedrock	0.47	Low adsorption Slope Depth to bedrock	1.00
Metonga	Slope Too stony	0.47	Low adsorption Slope	1.00

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast			
	Rating class and limiting features	Value	Rating class and limiting features	Value
		<u> </u>		
542B:	İ	İ		į
Haugen, very stony	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid Restricted	0.91
	permeability Too stony	0.50	permeability	0.78
	Too acid	0.32	permeability	
Haugen	Very limited	İ	Very limited	İ
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability Too acid		Restricted	0.78
	Too acid	0.32	permeability	
542C:	 			
Haugen, very stony	Very limited	į	Very limited	į
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too stony	0.50	permeability	
	Too acid	0.32	Slope	0.04
	Slope	0.04		
Haugen	 Very limited	į	 Very limited	i
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.89	Too acid	0.91
	permeability		Restricted	0.78
	Too acid	0.32	permeability	0.04
	Slope 	0.04	Slope	0.04
543B:		İ		
Anigon	Very limited	ĺ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.08	Too acid	0.31
543C2:	 	 	 	
	 Very limited		 Very limited	i
3	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	į
	Too acid	0.08	Too acid	0.31
	Slope	0.04	Slope	0.04
544F:	 		l I	
Menahga	 Very limited		 Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity	İ	Low adsorption	1.00
	Too acid	0.50	Slope	1.00
	100 4014	1		1-00
	Leaching Droughty	0.45	Too acid	0.99

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	l-	Application of sewage sludg	je
	Rating class and	Value	Rating class and	Value
	limiting features	<u>i</u>	limiting features	<u> </u>
5445				
544F: Mahtomedi	 Very limited	l I	 Very limited	l I
Mancomean	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	į
	capacity		Slope	1.00
	Droughty	1.00	Droughty	1.00
	Leaching Too acid	0.45	Too acid	0.42
	100 acid	10.11	 	
555A:			 	i
Fordum	 Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	1
	Depth to	1.00	Depth to	1.00
	saturated zone	1 00	saturated zone	
	Flooding Ponding	1.00 1.00	Flooding Ponding	1.00
	Runoff	0.40	Policing	1
			! 	i
574B:	j	j	İ	İ
Sayner	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.99	Droughty	0.99
	Leaching Too acid	0.45	Too acid	0.77
			! 	i
574C:	İ	i		i
Sayner	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.99	Droughty	0.99
	Leaching Slope	0.45 0.37	Too acid	0.77
	Too acid	0.22	probe	0.37
574E:	j	j	İ	İ
Sayner	Very limited		Very limited	1
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity Droughty	0.99	Slope Droughty	1.00
	Leaching	0.45		0.77
	Too acid	0.22		
	j	j	İ	İ
579B:				1
Parkfalls			Very limited	
	Depth to	1.00		1.00
	saturated zone Dense layer	1.00	saturated zone Too acid	0.77
	Droughty	0.61	!	0.61
	Too stony	0.50		0.31
	Restricted	0.41	•	j
	permeability		Depth to dense	0.20
		ļ	material	
		ļ		
C003	I .			
600A:	 Not rated		Not rated	1
600A: Haplosaprists	 Not rated 	 	 Not rated 	
	İ	 	 Not rated Not rated	

Table 22b.--Agricultural Waste Management--Continued

Map symbol	Application of		Application	
and soil name	manure and food		of sewage sludg	e
	processing wast			
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
615B:	 		 	
Cress	 Very limited		 Very limited	
Cless	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
		i		i
615C:		İ		İ
Cress	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope	0.04
	Slope	0.04		
615D:				
Cress	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	1 00	capacity	1.00
	Slope Droughty	1.00 0.60	Slope Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	100 acia	0.51
	100 4014		 	
623A:				
Capitola	 Very limited	i	 Very limited	i
_	Depth to	1.00	Depth to	1.00
	saturated zone	İ	saturated zone	İ
	Ponding	1.00	Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too stony	0.50	Depth to dense	0.46
	Depth to dense	0.46	material	
	material		Too acid	0.31
624A:				
Ossmer	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		 n ne		0 21
	Too acid 	0.08	Too acid 	0.31
632A:	 		 	
Aftad	 Verv limited		 Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone	i	saturated zone	i
	Restricted	0.41	Too acid	0.31
	permeability	İ	Restricted	0.30
	Too acid	0.08	permeability	j
632B:				
Aftad	Very limited		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability		Restricted	0.30
	Too acid	0.08	permeability	
	I	I	I	1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	e
	:		<u> </u>	
	Rating class and limiting features	Value 	Rating class and limiting features	Value
	İ			İ
632C: Aftad	 Very limited	 	 Very limited	
AI Cad	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Restricted	0.41	Too acid	0.31
	permeability	i	Restricted	0.30
	Too acid	0.08	permeability	i
	Slope	0.04	Slope	0.04
633F:	 	 	 	
Pence	 Very limited		 Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too acid	0.08	 	
Padus	 Very limited		 Very limited	İ
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Too acid	0.08	Too acid	0.31
648B:		 	 	
Sconsin	Very limited	İ	Very limited	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Depth to dense	0.54	Depth to dense	0.54
	material		material	
	Too acid	0.08	Too acid 	0.31
670C:		İ	İ	İ
Keweenaw	Somewhat limited		Somewhat limited	
	Leaching	0.45	Too acid	0.77
	Slope	0.37	Slope	0.37
	Too acid	0.22 0.01	Filtering capacity	0.01
	capacity		capacity	
	i	İ	İ	į
Pence	Very limited	!	Very limited	!
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty Slope	0.74	Slope Too acid	0.37
	Too acid	0.08	100 acid	0.31
670E:	 		 	
Keweenaw	Very limited	1 00	Very limited	1 00
	Slope Leaching	1.00 0.45	Slope Too acid	1.00
	Too acid	0.22	Too acid Filtering	0.77
	Filtering	0.01	capacity	
	capacity	İ		i
	·	İ	İ	İ

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	e
	processing wast			
	Rating class and limiting features	Value	Rating class and limiting features	Value
670E:				
Pence	Very limited		Very limited	
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity		Slope	1.00
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too acid	0.08	 	
571B:		İ		
Spoonerhill, stony	Very limited	Ì	Very limited	İ
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
			capacity	
Spoonerhill	 Very limited		 Very limited	
-	Depth to	0.99	Depth to	0.99
	saturated zone	i	saturated zone	i
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability	İ	permeability	İ
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
			capacity	
680B:	l I	 	l I	
Stanberry, stony	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		Droughty	0.06
Pence, stony	 Very limited	l I	 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too stony	0.50		1
	Too acid	0.08		İ
			l	
683A: Tipler	 Very limited	I I	 Very limited	1
115161	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1 00
	Depth to	0.86	Depth to	0.86
	saturated zone		saturated zone	
	Too acid	0.08	Too acid	0.31
	Droughty	0.03	Droughty	0.03
	Drouditt			

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	-	Application of sewage sludg	re
	processing wast			1
	Rating class and limiting features	Value	Rating class and limiting features	Value
		i		1
706A:	j	į		i
Winterfield	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity	!	capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding Leaching	1.00	Flooding Droughty	1.00
	Droughty	0.20	Dioughty	0.20
				i
Totagatic	Very limited	i	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Flooding	1.00	Flooding	1.00
	Ponding	1.00	Ponding	1.00
	Runoff	0.40	Too acid	0.42
7043			İ	
724A: Rib	 Very limited		 Vorus limited	1
KID	Filtering	1.00	Very limited Filtering	1.00
	capacity	1	capacity	1
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Too acid	0.31
	Too acid	0.08		j
Rock outcrop	 Not rated		 Not rated	ļ
FOCE				
726B: Sissabagama	 Town limited		 Very limited	
Bissabagama	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Restricted	0.89	Depth to	0.86
	permeability		saturated zone	
	Depth to	0.86	Restricted	0.78
	saturated zone	İ	permeability	İ
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
		!		ļ
733A:				
Wozny	Very limited	1 00	Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	saturated zone Ponding	1.00	Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too stony	0.50	Too acid	0.31
	Too acid	0.08	Filtering	0.01
		İ	capacity	İ
	į	į		İ
771A:				
Lenroot		[Very limited	!
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Droughty	0.89	Droughty	0.89
	Leaching	0.45	Too acid	0.42
	Too acid	0.11	I	1

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of		Application of sewage sludg	re
	processing wast			
	Rating class and	Value		Value
	limiting features	<u> </u>	limiting features	<u> </u>
827A:	 	i	 	
Scoba	 Very limited	İ	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Droughty	0.26	Too acid	0.31
	Too acid	0.08	Droughty	0.26
853C:	 	1	 	
	 Very limited	i	 Very limited	
3	Depth to	1.00	Depth to	1.00
	saturated zone	į	saturated zone	İ
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability			
	Too acid	0.08		
Ctionatt	 Town limited		 Very limited	
Stinnett	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too stony	0.50	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability	į	permeability	į
	Too acid	0.08		
		ļ		
Wozny	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone Ponding	1.00	saturated zone Low adsorption	1.00
	Leaching	0.70	Ponding	1.00
	Too stony	0.50	Too acid	0.31
	Too acid	0.08	Filtering	0.01
		į	capacity	į
856B:				
Stinnett	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone Too stony	0.50	saturated zone Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08		
		İ		i
857B:				
Frogcreek			Very limited	
	Depth to	1.00		1.00
	saturated zone		saturated zone	
	Dense layer	1.00	'	0.31
	Too stony Restricted	0.50	Restricted permeability	0.31
	permeability		herwegniirch	
	Too acid	0.08		
	İ	İ	İ	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	-	 Application of sewage sludg 	re
	Rating class and	Value	Rating class and limiting features	Value
	limiting features	<u> </u>	limiting reatures	1
857C:		İ		İ
Frogcreek	Very limited		Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted permeability	0.41	permeability Slope	0.16
	Slope	0.16	blobe	0.10
	blope			i
873B:		i		i
Stanberry	Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	0.06
	permeability	1	Droughty	10.00
873C:	 		 	İ
Stanberry	 Very limited	i	 Very limited	1
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	İ
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Slope	0.37
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
873D:	1		 	l I
Stanberry	 Very limited		 Very limited	i i
Standerry	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	
	capacity	i	Low adsorption	1.00
	Dense layer	1.00	Slope	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted	0.31
			permeability	
905A:			İ	
Cublake	 Vorus limited		 Very limited	l I
Cubiake	Filtering	1.00	_	1.00
	capacity		capacity	
	Dense layer	1.00		0.86
	Depth to	0.86	saturated zone	i
	saturated zone	į	Too acid	0.77
	Too acid	0.22	Droughty	0.01
	Droughty	0.01		
				ļ
926A:		1		
Flink	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity Depth to	1.00	capacity Depth to	1.00
	saturated zone		saturated zone	1 0 0
	Too acid	0.22	Too acid	0.77
	ĺ	i -		i
	•		•	

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	Rating class and	Value	Rating class and	Value
	limiting features	varue	limiting features	varue
943D: Stanberry	 Very limited		 Very limited	
beamberry	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Low adsorption	1.00
	Dense layer	1.00	Slope	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Too stony	0.50	Restricted	0.31
			permeability	
Greenwood	 Very limited	į	 Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	Filtering capacity	0.01	Filtering capacity	10.01
	capacity		capacity	
948A:		į		j
Billyboy	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone Too acid	0.08	saturated zone Too acid	0.31
	100 acid		100 actu	
970C:		į		İ
Keweenaw	Somewhat limited		Somewhat limited	
	Leaching	0.45	Too acid	0.77
	Slope	0.37	Slope	0.37
	Too acid	0.22	Filtering	0.01
	Filtering capacity	0.01	capacity	1
	capacity			
Pence	 Very limited	į	 Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Slope	0.37
	Too stony Slope	0.37	Too acid	0.31
Greenwood	 Very limited	i	 Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Low adsorption Too acid	1.00
	Too acid Leaching	0.94	Ponding	1.00
	neacuring			
970E:		į		i
Keweenaw	Very limited		Very limited	
	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.77
	Too acid	0.22	Filtering	0.01
	Filtering capacity	0.01	capacity	I

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	l-	Application of sewage sludg	re
	processing wast			
	Rating class and limiting features	Value	Rating class and limiting features	Value
970E:	 		 	
	 Very limited	i	 Very limited	1
	Slope	1.00	Filtering	1.00
	Filtering	1.00	capacity	i
	capacity	j	Slope	1.00
	Dense layer	1.00	Droughty	0.74
	Droughty	0.74	Too acid	0.31
	Too stony	0.50	 	
Greenwood	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	!	saturated zone	
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching 	0.90	Ponding 	1.00
1070C:		į		į
Fremstadt	1		Somewhat limited	
	Leaching	0.45	Too acid	0.31
	Slope Too acid	0.16 0.08	Slope Filtering	0.16
	Filtering	0.00	capacity	10.01
	capacity		capacity	
Cress	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Slope 	0.04
				į
1070D: Fremstadt	 Verv limited		 Very limited	
110	Slope	1.00	Slope	1.00
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	Filtering	0.01
	Filtering	0.01	capacity	ĺ
	capacity			
Cress	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Slope	1.00	Slope	1.00
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08	 	
1080B:				
Spoonerhill	: -		Very limited	
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted permeability	0.41	Restricted permeability	10.31
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
	, <u>5</u> 2		capacity	
	İ	į	i	į

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food	_	Application	
and soil name	processing wast		of sewage sludg	е
	·		Doting along and	177010
	Rating class and limiting features	Value	Rating class and limiting features	Value
		1		
1080B:		İ		İ
Spoonerhill, stony	Very limited	İ	Very limited	j
	Depth to	0.99	Depth to	0.99
	saturated zone		saturated zone	
	Leaching	0.45	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	Droughty	0.04
	Droughty	0.04	Filtering	0.01
	 	1	capacity	
Cress	 Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	İ	capacity	j
	Droughty	0.60	Droughty	0.60
	Leaching	0.45	Too acid	0.31
	Too acid	0.08		
1653C:				
Stanberry	 Very limited	l I	 Very limited	
Stamberry	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Dense layer	1.00	Low adsorption	1.00
	Depth to	0.99	Depth to	0.99
	saturated zone	i	saturated zone	i
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		Droughty	0.06
Parkfalls	 Very limited	 	 Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Dense layer	1.00	Too acid	0.77
	Droughty	0.61	Droughty	0.61
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		Depth to dense	0.20
			material	
Wozny	 Very limited	1	 Very limited	
Nozny	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
		1.00	:	1.00
	Leaching		Ponding	1.00
	Too stony	0.50	Too acid	0.31
	Too acid	0.08	Filtering	0.01
			capacity	
2015				
2015: Pits	 Not_rated		 Not rated	
FILS	NOC TALEG	 	NOC TALEG	I
2050:	! 		! 	
Landfill	Not rated	İ	 Not rated	i
		İ		İ

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food		Application of sewage sludg	re
did boll name	processing wast		Of Beauge Blues	, C
	Rating class and	Value	Rating class and	Value
	limiting features		limiting features	
3011A:				
Barronett	Very limited		Very limited	1 00
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
	Too acid	0.08	i	İ
3125A:			l	
Meehan	 Very limited		 Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	i
	Depth to	1.00		1.00
	saturated zone	İ	saturated zone	İ
	Droughty	0.94	Droughty	0.94
	Leaching	0.45	Too acid	0.85
	Too acid	0.27		
3126A:			 	
Wurtsmith	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	0.99	Too acid	1.00
	saturated zone		Depth to	0.99
	Droughty	0.85	saturated zone	
	Too acid	0.78	Droughty	0.85
	Leaching	0.45	 	
3276A:	į	į		į
Au Gres	Very limited	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone Droughty	0.29	saturated zone Low adsorption	1.00
	Droughty	0.29	Droughty	0.29
		İ		
3312B: Glendenning, very			 	
stony	 Verv limited		 Very limited	
beeny	Depth to	1.00		1.00
	saturated zone		saturated zone	
	Too stony	0.50	•	0.31
	Restricted	0.41	Restricted	0.31
	permeability	į	permeability	İ
	Too acid	0.08		
Glendenning	 Very limited		 Very limited	
-	Depth to	1.00	: -	1.00
	saturated zone	İ	saturated zone	İ
	Restricted	0.41	Too acid	0.31
	Restricted permeability	0.41	Too acid Restricted	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast		Application of sewage sludg	re
	Rating class and	Value	Rating class and	Value
	limiting features	varue	limiting features	value
22263				
3336A: Fenander	 Very limited	1	 Very limited	
renander	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding	1.00	Ponding	1.00
	Leaching	0.70	Restricted	0.31
	Restricted	0.41	permeability	
	permeability		 	
3403A:		İ		
Loxley	Very limited	İ	Very limited	İ
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
		[
Beseman	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.94	Too acid	1.00
	Leaching	0.90	Ponding	1.00
	Restricted	0.41	Restricted	0.31
	permeability		permeability	
Dawson	 Very limited		 Very limited	1
245011	Filtering	1.00	Filtering	1.00
	capacity	į	capacity	İ
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Ponding Too acid	1.00	Low adsorption Too acid	1.00
	Leaching	0.94	Ponding	1.00
3424C:		[[
Frogcreek	Very limited		Very limited	
	Depth to saturated zone	1.00	Depth to saturated zone	1.00
	Dense layer	1.00	Too acid	0.31
	Too stony	0.50	Restricted	0.31
	Restricted	0.41	permeability	j
	permeability			
	Too acid	0.08		
Magroc	 Very limited		 Very limited	1
	Depth to	1.00	Depth to	1.00
	saturated zone	į	saturated zone	İ
	Too stony	0.50	Low adsorption	1.00
	Too acid	0.08	Too acid	0.31
Stinnett	 Verv limited		 Very limited	
	Depth to	1.00	Depth to	1.00
	saturated zone		saturated zone	
	Too stony	0.50	Too acid	0.31
	Restricted	0.41	Restricted	0.31
	Restricted permeability Too acid	0.41	Restricted permeability	0.31

Table 22b.--Agricultural Waste Management--Continued

Map symbol and soil name	Application of manure and food processing wast	l-	Application of sewage sludg	e
	Rating class and		Rating class and	Value
	limiting features		limiting features	
3424C:				
Rock outcrop	 Not rated 	 	 Not rated 	
3446A:		į		į
Newson	<u>-</u>	1	Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Depth to	1.00	Depth to	1.00
	saturated zone	ļ	saturated zone	!
	Ponding	1.00	Low adsorption	1.00
	Too acid	0.62	Too acid	1.00
	Runoff	0.40	Ponding	1.00
3448B:				
Grettum	Very limited		Very limited	
	Filtering	1.00	Filtering	1.00
	capacity		capacity	
	Too acid	0.27	Too acid	0.85
	Droughty	0.02	Droughty	0.02
3448C:	 		 	
Grettum	 Very limited	i	 Very limited	i
	Filtering	1.00	Filtering	1.00
	capacity	i	capacity	i
	Too acid	0.27	Too acid	0.85
	Slope	0.04	Slope	0.04
	Droughty	0.02	Droughty	0.02
3516A:	 		 	
	 Very limited		 Very limited	1
DIIMIGNO	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Depth to	0.86	Depth to	0.86
	saturated zone	1	saturated zone	
	Too acid	0.11	Too acid	0.42
	Droughty	0.07	Droughty	0.07
3629B:				
Perida	 Very limited		 Very limited	1
relida	Filtering	1.00	Filtering	1.00
	capacity	1	capacity	1
	Restricted	1.00	Restricted	1.00
	permeability	1		1
		10 45	permeability Too acid	0.85
	Leaching Too acid	0.45	l .	0.09
		0.27	Depth to saturated zone	10.09
	Depth to saturated zone		sacurated zone	
M. W.				
M-W: Miscellaneous water	 Not rated		 Not rated	
W:	[[
Water	_	i	Not rated	1

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include engineering index properties, physical and chemical properties, and pertinent soil and water features.

Engineering Index Properties

Table 23 gives the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the Glossary.

Classification of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group

index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field

Liquid limit and plasticity index (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of particle-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is generally omitted in the table.

Physical Properties

Table 24 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter in diameter. In table 24, the estimated clay content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay affect the fertility and physical condition of the soil and the ability of the soil to adsorb cations and to retain moisture. They influence shrinkswell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at ¹/₃- or ¹/₁₀-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity (K_{sat}). The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field,

particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at ¹/₃- or ¹/₁₀-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 24, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained by returning crop residue to the soil. Organic matter has a positive effect on available water capacity, water infiltration, soil organism activity, and tilth. It is a source of nitrogen and other nutrients for crops and soil organisms.

Erosion factors are shown in table 24 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are described in the "National Soil Survey Handbook" (USDA, NRCS).

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer,

the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Properties

Table 25 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Water Features

Soil moisture status is an estimate of the fluctuating water content in a soil. It greatly influences vegetation type and plant growth; physical properties of soils, such as permeability, workability, strength, linear extensibility, and frost action; and chemical interactions and transport. Many other properties, qualities, and interpretations also are affected. Soil moisture status is important in the classification of soils, wetland, and habitat.

Table 26 gives estimates of soil moisture for each component of a map unit at various depths for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most commonly. *Dry* indicates a moisture condition under which most plants (especially crops) cannot extract water for growth. *Moist* indicates a moisture condition under which soil water is most readily available for plant growth. *Wet* indicates a condition under which water will stand in an unlined hole or at least a condition under which the soil is too wet for the growth of most agricultural species. A moisture status of 4.0-6.7 (wet) indicates that most of the time the component is saturated at some depth between 4.0 feet and 6.7 feet during the month designated. In some years the soil may be saturated at a depth of less than 4.0 feet or more than 6.7 feet; however, field observations indicate that the soil will be saturated between these depths in most years. In the summer, the soil may show the effects of drying plus intermittent rains that result in a moist or wet layer over a dry layer that gets moist or wet again.

In table 26, *hydrologic soil groups* are groups of soils that, when saturated, have the same runoff potential under similar storm and ground cover conditions. The soil properties that affect the runoff potential are those that influence the minimum rate of infiltration in a bare soil after prolonged wetting and when the soil is not frozen. These

properties include the depth to a zone in which the soil moisture status is wet, the infiltration rate, permeability after prolonged wetting, and the depth to a very slowly permeable horizon or horizons. The influences of ground cover and slope are treated independently and are not taken into account in hydrologic soil groups.

In the definitions of the hydrologic soil groups, the infiltration rate is the rate at which water enters the soil at the surface and is controlled by surface conditions. The transmission rate is the rate at which water moves through the soil and is controlled by properties of the soil horizons.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist chiefly of very deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have a moderately fine to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a horizon or horizons that impede the downward movement of water or soils that have a moderately fine or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clayey soils that have a high linear extensibility; soils that have a zone, high in the profile, in which the soil moisture status is wet on a permanent basis; soils that have a claypan or clay horizon or horizons at or near the surface; and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

Flooding, the temporary covering of the soil surface by flowing water, is caused by overflow from streams or by runoff from adjacent slopes. Shallow water standing or flowing for short periods after rainfall or snowmelt is not considered flooding. Standing water in marshes and swamps or in closed depressions is considered to be ponding.

Table 27 gives estimates of the frequency and duration of flooding for every month of the year. Flooding frequency is the annual probability of a flood event expressed as a class. None indicates no reasonable possibility of flooding (the chance of flooding is nearly 0 percent in any year, or flooding is likely less than once in 500 years). Very rare indicates that flooding is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year, or flooding is likely less than once in 100 years but more than once in 500 years). Rare indicates that flooding is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year, or flooding is likely 1 to 5 times in 100 years). Occasional indicates that flooding occurs infrequently under usual weather conditions (the chance of flooding is 5 to 50 percent in any year, or flooding is likely 5 to 50 times in 100 years). Frequent indicates that flooding is likely to occur often under usual weather conditions (the chance of flooding is more than 50 percent in any year, or flooding is likely more than 50 times in 100 years; but the chance of flooding is less than 50 percent in all months in any year). Very frequent indicates that flooding is likely to occur very often under usual weather conditions (the chance of flooding is more than 50 percent in all months of any year).

Flooding duration is the average duration of inundation per flood occurrence expressed as a class. *Extremely brief* is 0.1 hour to 4.0 hours; *very brief* is 4 to 48 hours; *brief* is 2 to 7 days; *long* is 7 to 30 days; and *very long* is more than 30 days. About two-thirds to three-fourths of all flooding occurs during the stated period.

The information on flooding is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and level of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation.

Table 28 gives estimates of the frequency, duration, and depth of ponding for every month of the year. The depths displayed are representative values that are indicative of conditions that occur most of the time.

Ponding frequency is the number of times ponding occurs over a period of time. *None* indicates no reasonable possibility of ponding (the chance of ponding is nearly 0 percent in any year). *Rare* indicates that ponding is unlikely but possible under unusual weather conditions (the chance of ponding ranges from nearly 0 percent to 5 percent in any year, or ponding is likely 0 to 5 times in 100 years). *Occasional* indicates that ponding is expected infrequently under usual weather conditions (the chance of ponding ranges from 5 to 50 percent in any one year, or ponding is likely 5 to 50 times in 100 years). *Frequent* indicates that ponding is likely to occur under usual weather conditions (the chance of ponding is more than 50 percent in any year, or ponding is likely more than 50 times in 100 years).

Ponding duration is the average length of time of the ponding occurrence. It is expressed as *very brief* (less than 2 days), *brief* (2 to 7 days), *long* (7 to 30 days), and *very long* (more than 30 days).

Soil Features

Table 29 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A restrictive layer is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage. Subsidence takes place gradually, usually over a period of several years. The table shows the expected initial subsidence, which usually is a result of drainage, and total subsidence, which results from a combination of factors.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a zone of saturation close to the surface in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low, moderate,* or *high,* is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low, moderate,* or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

Soil Survey

Table 23.--Engineering Index Properties

(Absence of an entry indicates that data were not estimated)

Map symbol	 Depth	USDA texture	Classi	fication	Frag	ments		rcentag	_	-	 Liquid	 Plas
and				1	>10	3-10					limit	
soil name	 		Unified	AASHTO		inches	4	10	40	200	.	index
	In				Pct	Pct	<u> </u>				Pct	
								ļ				
3A:		 							!			
Totagatic		Muck	PT	A-8	0	0	100	100				
	4-8	Loamy fine	SM	A-2	0	0	100	100	50-80	20-35	0-23	NP-6
	l I	sand, loamy		I I	i i	 	l I	l I		l I		l I
	 	sand, rine		l I	i i	 	l I	l I		l i		l I
	 0_17	Fine sand,	SM	 A-2	0	 0	100	100	 50-80	5-45	0-23	 ND _ 6
	0-17	sand, loamy	SM	A-2	0	0	1 100	1 100	30-80	3-43	0-23	MF - 0
	 	sand, loamy		i	ì	 	l I	İ	i			i i
	 	fine sand		i	1	! 	i i	i i	i	İ		İ
	17-28	Fine sand,	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-23	NP-6
	-/ -0	sand, loamy		,			====	====			0 20	
	i	sand, coarse		ì	i	<u> </u>	i	i	i	i		i
	İ	sand, mucky			ì	i	İ	i	i	i	i	i
	İ	sand		i	i	i	İ	İ	i	i	i	i
	28-46	Sand, fine	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-23	NP-6
	į	sand, loamy	j	į	Ì	į	İ	İ	İ	İ	İ	İ
	ĺ	sand, coarse		İ	İ	İ	ĺ	İ	İ	İ	İ	İ
		sand, mucky										
		sand										
	46-70	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80	5-45	0-23	NP-6
		sand, loamy										
		sand, fine										
		sand, loamy										
		fine sand		Ţ								
	70-80	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80	5-45	0-23	NP-6
		sand, fine		ļ					!	!		!
		sand, loamy										
		sand, loamy							!			
	l I	fine sand		l I	l I	 	 	l I				
Bowstring	0-38	Muck	PT	A-8	0	0	100	100				
-	38-47	Fine sand,	SM, SP-SM	A-2	0	0	100	100	85-95	10-20	j	NP
		sand, loamy										
		sand										
	47-80	Muck	PT	A-8	0	0	100	100				
Ausable	 0-10	Muck	 PT	 A-8		 0	100	 100	 			
Vabanie	10-60	Sand	SM	A-2-4, A-3	0	0	1	100 85-100	1	5-15	1	 NP-4
	10-00			A-2-4, A-3	0		1202100	1222100		1 2-13	0-21	45 - 3
		T. Control of the Con										

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	i	ments		rcentag sieve n	e passi: umber	ng	Liquid	
and			! 6! 1		>10	3-10			1 40		limit	
soil name	<u> </u>	1	Unified	AASHTO		inches	4	10	40	200	<u> </u>	index
	In		1	 	Pct	Pct	 	 			Pct	
22A:	 			 	 	 	l I	l I	 	 		
Comstock	0-8	Silt loam	ML, CL-ML, CL	A-4, A-6	0	0	98-100	95-100	90-100	85-95	23-41	4-15
	8-15	Silt loam	CL, CL-ML	A-4	0	0	98-100	95-100	90-100	85-95	18-33	4-13
	15-21	Silt loam,	CL	A-6	0	0	98-100	95-100	90-100	85-95	26-40	10-20
		silty clay										
		loam										
	21-34	Silt loam,	CL	A-6	0	0	98-100	95-100	90-100	85-95	29-42	12-21
		silty clay										
		loam										
	34-44	Stratified silt	CL-ML, CL	A-4	0	0	98-100	95-100	85-100	65-95	18-32	4-13
		loam to very						!	ļ			!
		fine sand										
	44-60	Stratified silt	CL-ML, CL	A-4	0	0	98-100	95-100	85-100	65-95	18-32	4-13
	 -	loam to very		 			 					
	 	line sand	I	 	 	 	 	l I	l I	l I		
24A:	 		1	 	 	 	 	 	 	I I		
Poskin	 0-9	Silt loam	CL-ML, CL	 A-4	0	0-7	 95-100	90-100	80-100	70-95	20-30	5-10
		Silt loam	CL-ML	A-4	0				80-100	1	1	4-7
	12-19	Silt loam	CL	A-4, A-6	0	0-7			80-100		1	7-15
	19-36	Silt loam	CL	A-4, A-6	0	0-7	95-100	90-100	80-100	70-95	25-35	9-15
	36-39	Sandy loam,	SM, ML,	A-1, A-2, A-4	0	0-7	50-100	45-100	30-100	10-90	0-25	NP-7
		loam, gravelly	CL-ML, SC-SM									
		fine sandy										
		loam, very										
		gravelly sandy										
		clay loam						!	ļ			!
	39-60	Stratified sand	1	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP									
	 	gravelly coarse sand										
	 	Coarse sand	1	 	 	 	 	 	l I	I I	1	1
27A:	! 					 	 	 		İ		
Scott Lake	0-10	Sandy loam	SM, SC	A-2-4, A-4	0	0-7	80-100	75-100	50-80	25-45	0-26	NP-8
	10-17	Sandy loam	SC, SM	A-2-4, A-4	0	0-7	75-100	75-100	50-80	25-45	0-26	NP-8
	17-24	Sandy loam	SC, SM	A-2-4, A-4	0	0-7	75-100	75-100	50-80	25-40	18-28	3-9
	24-31	Gravelly loamy	SM, GM	A-1-a, A-2-4,	0	0-25	30-100	25-100	15-80	5-30	0-23	NP-6
		sand, loamy		A-3								
		sand, very										
		gravelly loamy										
		coarse sand	!	!		[ļ	!			[
	31-80	Stratified sand	1	A-1, A-2, A-3	0	0-9	30-100	25-95	15-65	0-15	0-14	NP
		to very	SP, SP-SM									
	 -	gravelly										
	 	coarse sand		 	1	1	l I	[[1	1		
	I	I	I	1	1	I	I	I	I	1	1	I

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	 	Classi	ifi	cati	on			Fragi	ments		_	ge passi number	-	 Liquid	 Plas-
and										>10	3-10					limit	ticity
soil name			τ	Jnified		A	ASH	го		inches	inches	4	10	40	200		index
	In	1								Pct	Pct					Pct	
28B:											 						
Haugen, very																	
stony	0 - 4	Sandy loam	SM,	SC-SM	2	A-2-	4,	A-4		0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	4-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam		SC-SM		A-1,	A-	2, 1	A-4	0-5	0-7 	55-100 	50-90 	35-85 	15-65 	16-28 	1-9
	15-23		 SM, 	SC-SM		A-1,	A-	2, 1	A-4	0-5	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 16-28 	 1-9
	23-35	Gravelly sandy loam, sandy loam, gravelly fine sandy loam		SC-SM		A-1,	A-	2, 1	A-4	0-5	 0-7 	 55-100 	 50-90 	35-75	15-45	 16-27 	2-10
	35-49	Sandy loam, gravelly sandy loam, fine sandy loam	sc, 	SM		A-2,	A-	4, 1	A-1	0-5	0-7 	55-100 	50-90 	35-75 	15-45	17-28 	3-10
	49-79	Gravelly sandy loam, sandy loam, fine sandy loam	SC, 	SC-SM		A-1,	A-	2		0-5	0-7 	55-100 	50-90	35-75	15-45	18-30 	4-12
	79-80	Gravelly sandy loam, sandy loam, fine sandy loam	SC, 	SC-SM, S	ME	A-1,	A-	2, 1	A-4	0-5	0-7	55-100 	50-90 	35-75 	15-45 	17-27 	3-10

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Clas	sification	i	ments		_	ge passi number	_		 d Plas- ticity
and					>10	3-10	ļ				limit	
soil name		<u> </u>	Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
28B:					İ		l I			İ		l I
Haugen	0 - 7	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	7-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam	SC-SM, SM 	A-1, A-2, A-4	0-5	0-7 	55-100 	50-90	35-85	15-65 	16-28 	1-9
	15-23	Gravelly sandy loam, sandy loam, fine sandy loam, gravelly loam	 SC-SM, SM 	A-1, A-2, A-4	0-5	0-7 	 55-100 	50-90 	35-75	 15-45 	16-28 	 1-9
	23-35	Gravelly sandy loam, sandy loam, gravelly fine sandy loam	İ	A-1, A-2, A-4	0-5 	0-7 	 55-100 	50-90 	35-75	15-45	 16-27 	2-10
	35-49	Sandy loam, gravelly sandy loam, fine sandy loam	SM, SC 	A-2, A-4, A-1	0-5 	0-7 	 55-100 	50-90 	35-75 	15-45 	17-28 	3-10
	49-79	Gravelly sandy loam, sandy loam, fine sandy loam	SC-SM, SC 	A-1, A-2	0-5 	0-7 	 55-100 	50-90 	35-75 	15-45 	18-30	4-12
	79-80	Gravelly sandy loam, sandy loam, fine sandy loam	SC-SM, SM, 	SC A-1, A-2, A-4	0-5	0-7 	55-100 	50-90	35-75	15-45 	17-27 	3-10

Map symbol	Depth	USDA texture	Classif	icati	on		Fragn	nents		rcentag sieve n	_	-	 Liquid	 Plas-
and							>10	3-10					limit	ticity
soil name			Unified	A.	ASHTO		inches		4	10	40	200		index
	In						Pct	Pct		ļ			Pct	
28B: Rosholt, very		 	 				 		 	 	 			
stony	0 - 4	Sandy loam	SM	A-2,	A - 4		 1-5	0-3	 80-100	 75-100	 50-75	25-40	0-21	 NP-4
2		Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1, 		A-4		0-3		50-100			0-23	1
	10-14	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1,	A-2,	A-4	0 	0-3	55-100 	50-100 	35-75 	15-40	0-23	NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	SC, SM	A-1, 	A-2,	A-4	0 	0-3	55-100 	50-100 	35-80 	20-45	0-26	NP - 8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	GM, SP-SM, SM, GP-GM	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	20-80	5-25 	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	GP, SP, SP-SM, GP-GM 	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-95 	15-65 	0-15	0-14	NP
Rosholt		Sandy loam Sandy loam, fine sandy loam, gravelly loamy sand	 SM	A-2, A-1,	A-4 A-2,	A-4	0 0 	0-3	80-100 55-100 	75-100 50-100 			0-21	1
	10-14	Sandy loam, fine sandy loam, gravelly loamy sand	 SM, SC-SM 	 A-1, 	A-2,	A-4	0 	0-3	 55-100 	 50-100 	 35-75 	15-40	0-23	 NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	SM, SC	A-1,	A-2,	A-4	0 	0-3	55-100 	50-100 	35-80 	20-45	0-26	NP - 8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	SP-SM, GM, GP-GM, SM	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	20-80	5-25 	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	SP, GP-GM, GP, SP-SM 	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	 15-65 	0-15	0-14	NP

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		_	ge passi number	-	Liquid	 Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
28C:			 		 	 						
Haugen, very												
stony	0 - 4	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	4-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam	SM, SC-SM 	A-1, A-2, A-4 	0-5 	0-7 	55-100 	50-90 	35-85 	15-65 	16-28 	1-9
	15-23		 SC-SM, SM 	A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 16-28 	 1-9
	23-35	Gravelly sandy loam, sandy loam, gravelly fine sandy loam	İ	A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	35-75	15-45	 16-27 	2-10
	35-49	Sandy loam, gravelly sandy loam, fine sandy loam	 SC, SM 	A-2, A-4, A-1 	0-5 	0-7 	 55-100 	50-90 	35-75	15-45	17-28 	3-10
	49-79	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM 	A-1, A-2 	0-5 	0-7 	 55-100 	50-90 	35-75 	15-45	18-30 	4-12
	79-80	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM, SM 	A-1, A-2, A-4 	0-5	0-7 	55-100 	50-90	35-75	15-45 	17-27 	3-10

Soi
Sur
é
호

		Classification				:	sieve n		Liquid	d Plas-	
				>10	3-10	İ				limit	ticity
		Unified	AASHTO	inches	inches	4	10	40	200		index
In				Pct	Pct					Pct	
0 - 7	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
7-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-85	15-65	16-28	1-9
	gravelly sandy										
	loam, fine										
	sandy loam,										
	gravelly loam										
15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-75	15-45	16-28	1-9
	loam, sandy										
	loam, fine										
	sandy loam,										
	gravelly loam										
23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-75	15-45	16-27	2-10
	loam, sandy										
	loam, gravelly										
	fine sandy										
	loam										
35-49	Sandy loam,	SM, SC	A-2, A-4, A-1	0-5	0-7	55-100	50-90	35-75	15-45	17-28	3-10
	gravelly sandy										
	loam, fine										
	sandy loam										
49-79	Gravelly sandy	SC, SC-SM	A-1, A-2	0-5	0-7	55-100	50-90	35-75	15-45	18-30	4-12
	loam, sandy										
	loam, fine										
	sandy loam										
79-80	Gravelly sandy	SC, SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-75	15-45	17-27	3-10
	loam, sandy										
Ì	loam, fine										
Ì	sandy loam										
1 4	0-7 7-15 15-23 23-35	0-7 Sandy loam 7-15 Sandy loam, 7-15 Sandy loam, 9 gravelly sandy 1 loam, fine 9 sandy loam, 15-23 Gravelly sandy 1 loam, sandy 1 loam, fine 9 sandy loam, 10 gravelly loam 23-35 Gravelly sandy 1 loam, sandy 1 loam, gravelly 1 loam, gravelly 1 fine sandy 1 loam, 1 gravelly sandy 1 loam 1 Gravelly sandy 1 loam, fine 1 sandy loam loam, sandy 1 loam, sand	0-7 Sandy loam SC-SM, SM 7-15 Sandy loam, SM, SC-SM gravelly sandy loam, fine sandy loam, gravelly loam SC-SM, SM loam, sandy loam, fine sandy loam, gravelly loam SC-SM, SM loam, fine sandy loam, gravelly loam SC-SM, SM loam, sandy loam, gravelly fine sandy loam, gravelly fine sandy loam SM, SC gravelly sandy loam, fine sandy loam SM, SC gravelly sandy loam, fine sandy loam SM, SC SC-SM loam, sandy loam, fine sandy loam SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SM, SM, SC SM, SM, SC SM, SM, SC SM, SM, SC SM, SM SM, SC SC-SM, SM SM, SC SC-SM, SM SM, SC SM, SM, SC SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SC SM, SM, SM, SM, SM, SM, SC SM, SM, SM, SM, SM, SM, SM, SM, SM, SM,	0-7 Sandy loam SC-SM, SM A-2-4, A-4 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 gravelly sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 loam, sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 loam, sandy loam, gravelly loam A-1, A-2, A-4 loam, sandy loam, gravelly fine sandy loam, gravelly fine sandy loam SS-49 Sandy loam, SM, SC A-2, A-4, A-1 gravelly sandy loam, fine sandy loam A-1, A-2 A-2 loam, sandy loam, fine sandy loam A-1, A-2 A-2 loam, fine sandy loam A-1, A-2 A-2 loam, sandy loam, fine sandy loam A-1, A-2 A-2, A-4 loam, sandy loam, fine sandy loam A-1, A-2, A-4 loam, sandy loam, fine sandy loam A-1, A-2, A-4 loam, sandy loam, fine sandy loam A-1, A-2, A-4 loam, sandy loam, fine sandy	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 gravelly sandy loam, gravelly loam 15-23 Gravelly sandy SC-SM, SM A-1, A-2, A-4 0-5 loam, sandy loam, gravelly loam sandy loam, gravelly loam 23-35 Gravelly sandy SC-SM, SM A-1, A-2, A-4 0-5 loam, sandy loam, gravelly fine sandy loam SM, SC A-2, A-4, A-1 0-5 gravelly sandy loam 35-49 Sandy loam, SM, SC A-2, A-4, A-1 0-5 gravelly sandy loam, fine sandy loam 49-79 Gravelly sandy SC, SC-SM A-1, A-2 0-5 loam, sandy loam, fine sandy loam sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 loam, sandy loam, fine sandy loam 10-30 Gravelly sandy SC, SC-SM, SM A-1, A-2, A-4 0-5 loam, sandy loam, fine sandy lo	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 gravelly sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 0-5 0-7 loam, sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 0-5 0-7 loam, sandy loam, gravelly fine sandy loam SM, SC A-2, A-4, A-1 0-5 0-7 gravelly sandy loam, fine sandy loam A-2, A-4, A-1 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam A-1, A-2, A-4 0-5 0-7 loam, sandy loam, fine sandy loam, fine sandy loam, fine Sandy loam	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 85-100 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 55-100 gravelly sandy	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 85-100 75-98 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 gravelly sandy	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 85-100 75-98 50-70 7-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-85 gravelly sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam, gravelly loam SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, gravelly loam SM, SC A-2, A-4, A-1 0-5 0-7 55-100 50-90 35-75 gravelly sandy loam, gravelly fine sandy loam SM, SC A-2, A-4, A-1 0-5 0-7 55-100 50-90 35-75 gravelly sandy loam, fine sandy loam SM, SC A-2, A-4, A-1 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam Gravelly sandy SC, SC-SM A-1, A-2 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SM, SC SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam SC, SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 loam, sandy loam, fine sandy loam, fine	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 85-100 75-98 50-70 20-40 77-15 Sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-85 15-65 gravelly sandy 10am, fine sandy loam, gravelly loam 15-23 Gravelly sandy SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 15-45 10am, sandy 10am, gravelly loam 23-35 Gravelly sandy SC-SM, SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-75 15-45 10am, gravelly 10am, gravelly fine sandy 10am, gravelly fine sandy 10am, gravelly fine sandy 10am, fine gravelly sandy 10am, fine sandy loam SC-SM A-1, A-2 0-5 0-7 55-100 50-90 35-75 15-45	0-7 Sandy loam SC-SM, SM A-2-4, A-4 0-5 0-7 85-100 75-98 50-70 20-40 19-32 gravelly sandy loam, SM, SC-SM A-1, A-2, A-4 0-5 0-7 55-100 50-90 35-85 15-65 16-28 gravelly sandy loam, sandy loam, gravelly loam

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	n	i	nents		rcentago sieve n	-	-	Liquid	
and soil name	 		Unified	77	SHTO	>10	3-10 inches	 4	10	40	200	limit	ticity index
SOII Hame	l In	<u> </u>		AAs	SHIO	Pct	Pct	* 	1	10	200	Pct	Index
	İ		İ	j				į	İ	i	i		İ
28C:				Ţ						ļ			
Rosholt, very stony	 0-4	 Sandy loam	 SM	 A-2, A		 1-5	 0-3		 75 100		25-40	0-21	NTD 4
scony	4-10	Sandy loam,	SC-SM, SM		A-4 A-2, A-4				50-100			0-21	1
		fine sandy		, -	,							0 20	
	j	loam, gravelly	j	j		į	j	į	İ	į	İ	j	į
		loamy sand							[[]		
	10-14	Sandy loam,	SC-SM, SM	A-1, A	A-2, A-4	0	0-3	55-100	50-100	35-75	15-40	0-23	NP-6
	 	fine sandy loam, gravelly	 			1	 	 	 				
	i İ	loamy sand		i		İ	İ	İ	i	i	İ	İ	i
	14-28	Sandy loam,	SM, SC	A-1, A	A-2, A-4	0	0-3	55-100	50-100	35-80	20-45	0-26	NP-8
		fine sandy		-					ļ	!			!
	 	loam, gravelly loam					 						
	 28-34	Gravelly loamy	GM, SP-SM,	 A-1. A	A-2, A-3	0	0-25	 30-100	 25-100	20-80	5-25	0-23	 NP-6
		sand, very	SM, GP-GM		,								
		gravelly	ĺ	İ				ĺ	ĺ	ĺ	İ		ĺ
		coarse sand,											
	 34-60	sand Stratified sand	 GD GD-GM	 20_1 z	A-2, A-3	 0	 0-25	 30_100	 25-95	 15-65	0-15	0-14	 NP
	34-00	to very	GP, SP-SM		1-2, A-3		0-25		25-55		0-15	0-14	141
	j	gravelly	j	j		į	İ	į	į	İ	j	j	į
		coarse sand		-					ļ	!			!
Rosholt	 0-8	 Sandy loam	 sm	 A-2, A	A _ 4	 0	 0-3	 80_100	 75-100	 50-75	25-40	0-21	 NID _ 4
ROBHOIC		Sandy loam,	SM, SC-SM		A-2, A-4	1					15-40		1
	j	fine sandy	İ	i		į	İ	į	į	i	i	j	i
		loam, gravelly	!					ļ	ļ				
	10 14	loamy sand	SM, SC-SM	7 7 7	A-2, A-4	 0	 0-3	 EE 100	 EO 100		15-40	0-23	NTD 6
	10-14 	fine sandy	SM, SC-SM	A-1, F	A-2, A-4	0	0-3		50-100	33-75	15-40	0-23	NP - 6
	İ	loam, gravelly		İ		İ		İ	İ	i	İ	İ	i
		loamy sand											
	14-28	Sandy loam,	SM, SC	A-1, A	A-2, A-4	0	0-3	55-100	50-100	35-80	20-45	0-26	NP-8
	 	fine sandy loam, gravelly	 			I I	 	l I	 	 		1	
	! 	loam		1						i			i
	28-34	Gravelly loamy	GM, GP-GM,	A-1, A	A-2, A-3	0	0-25	30-100	25-100	20-80	5-25	0-23	NP-6
		sand, very	SM, SP-SM	ļ						!			!
	 	gravelly coarse sand,	 	l I			 	l I	[[
	! 	sand		İ			 	l I	l I	İ			
	34-60	Stratified sand	GP-GM, GP,	A-1, A	A-2, A-3	0	0-25	30-100	25-100	15-65	0-15	0-14	NP
		to very	SP, SP-SM	ļ				ļ	ļ	!			
	 -	gravelly coarse sand		1			 		[
	 	coarse sand	 			1	l I	 	1	1	1	1	1

Classification Percentage passing Fragments Map symbol Depth USDA texture sieve number --|Liquid| Plasand >10 3-10 limit | ticity Unified AASHTO soil name inches inches 4 10 index Pct Pct Pct 33B: Chetek-----0-10 | Sandy loam SM, SC-SM A-2-4, A-4 0-5 0-15 |80-100|75-100|50-75 |25-40 0-23 NP-6 10-16 | Sandy loam, SC, SM |A-1, A-2, A-4| 0-5 0-15 |55-100|50-100|35-75 |15-40 0-26 | NP-8 gravelly sandy loam SM, SP-SM 0-15 |30-95 |25-95 |15-75 | 5-25 | 0-21 |NP-4 16-20 | Loamy sand, A-1, A-2-4, 0-5 gravelly loamy A-3 sand, gravelly sand, very gravelly coarse sand 20-60 | Stratified very | SP, SP-SM A-1-b 0-15 | 30-95 | 25-95 | 15-60 | 0-10 | 0-14 0-5 NP gravelly coarse sand to sand 33C: 0-15 |80-100|75-100|50-75 |25-40 | 0-23 |NP-6 Chetek-----0-10 | Sandy loam SM, SC-SM A-2-4, A-4 0-5 10-16 | Sandy loam, SM, SC |A-1, A-2, A-4| 0-5 0-15 | 55-100 | 50-100 | 35-75 | 15-40 0-26 NP-8 gravelly sandy loam SM, SP-SM 16-20 | Loamy sand, A-1, A-2-4, 0-5 0-15 | 30-95 | 25-95 | 15-75 | 5-25 | 0-21 | NP-4 gravelly loamy A-3 sand, gravelly

A-1-b

0-15 | 30-95 | 25-95 | 15-60 | 0-10 | 0-14 |

| sand, very | gravelly | coarse sand | 20-60 | Stratified very | SP-SM, SP

gravelly coarse sand to

sand

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	icati	on		Fragi			rcentag sieve n	-	_	Liquid	
and soil name		 	Unified	7	ASHTO		>10	3-10 inches	 4	10	40	200	limit	ticity index
SOII Hame	In			A	АБПІО		Pct	Pct	4	10	40	200	Pct	Index
38A:		 							 	[[
Rosholt	0-8 8-10	Sandy loam Sandy loam, fine sandy loam, gravelly loamy sand	SM SC-SM, SM 	A-2, A-1, 	A-4 A-2,	A-4	0 0 	0-3		75-100 50-100 			0-21	
	10-14 	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM 	A-1, 	A-2,	A-4	0 	0-3	55-100 	50-100 	35-75 	15-40	0-23	NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	SC, SM	A-1, 	A-2,	A-4	0 	0-3	55-100 	50-100 	35-80 	20-45	0-26	NP - 8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	GM, SP-SM, SM, GP-GM	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	20-80	5-25	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	GP, SP-SM, SP, GP-GM	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	15-65 	0-15	0-14	NP
38B:														
Rosholt		Sandy loam Sandy loam, fine sandy loam, gravelly loamy sand	SM SC-SM, SM 	A-2, A-1, 	A-4 A-2,	A-4	0 0 					25-40 15-40 	,	1
	 10-14 		 SM, SC-SM 	 A-1, 	A-2,	A-4	 0 	0-3	 55-100 	 50-100 	 35-75 	15-40	0-23	 NP - 6
	14-28 	Sandy loam, fine sandy loam, gravelly loam	SC, SM 	A-1, 	A-2,	A-4	0 	0-3	 55-100 	50-100 	35-80 	20-45	0-26	NP-8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	SM, SP-SM, GM, GP-GM	A-1, 	A-2,	A-3	0 	0-25	30-100 	25-100 	20-80	5-25 	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	SP-SM, GP-GM, GP, SP 	A-1, 	A-2,	A-3	0	0-25	30-100	25-100 	15-65 	0-15	0-14	NP

Map symbol	 Depth 	USDA texture	Classi	ficati	on 		Fragm >10	ments		rcentago sieve n	_	-	 Liquid limit	
soil name			Unified	A.	ASHTO		inches		4	10	40	200		index
	In	ļ	!	Ţ			Pct	Pct		ļ.	ļ	[Pct	ļ
38C:	 		 				 	 	 	 	 			
Rosholt	0-8	Sandy loam	SM	A-2,	A-4		0	0-3	80-100	75-100	50-75	25-40	0-21	NP-4
	8-10 	Sandy loam, fine sandy loam, gravelly loamy sand	SM, SC-SM	A-1, 	A-2,	A-4	0 	0-3	55-100 	50-100 	35-75 	15-40	0-23	NP - 6
	 10-14 	Sandy loam, fine sandy loam, gravelly loamy sand	 SC-SM, SM 	A-1, 	A-2,	A-4	0	0-3	 55-100 	 50-100 	 35-75 	15-40	0-23	 NP - 6
	 14-28 	Sandy loam, fine sandy loam, gravelly loam	 SC, SM 	A-1,	A-2,	A-4	0	0-3	 55-100 	 50-100 	 35-80 	20-45	0-26	NP - 8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	SP-SM, GM, GP-GM, SM	A-1,	A-2,	A-3	0	0-25	30-100	25-100	20-80	5-25	0-23	NP - 6
	34-60 	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1,	A-2,	A-3	0 	0-25	30-100 	25-100 	15-65 	0-15	0-14	NP
38D:	İ							 		İ				
Rosholt	8 - 0	Sandy loam	SM	A-2,	A-4		0	0-3	80-100	75-100	50-75	25-40	1	
	8-10 	Sandy loam, fine sandy loam, gravelly loamy sand	SM, SC-SM 	A-1, 	A-2,	A-4	0 	0-3 	55-100 	50-100 	35-75 	15-40 	0-23	NP - 6
	10-14 	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1, 	A-2,	A-4	0 	0-3	55-100 	50-100 	35-75 	15-40 	0-23	NP - 6
	 14-28 		SM, SC	A-1,	A-2,	A-4	0	0-3	 55-100 	50-100	35-80	20-45	0-26	NP-8

Map symbol	Depth	USDA texture	Classif	ication	Fragi	nents		rcentage sieve n	_	_	 Liquid	 Plas
and				ļ	>10	3-10				1	limit	
soil name	In	1	Unified	AASHTO	inches Pct	inches Pct	4	10	40	200	Pct	index
	111		 	 	PCC 	PCC 	 	 	 		PCL	
38C:				İ			İ	İ	İ	İ	į	İ
Rosholt	0 - 8	Sandy loam	SM	A-2, A-4	0	0-3	80-100	75-100	50-75	25-40	0-21	NP-4
	8-10	Sandy loam, fine sandy loam, gravelly loamy sand	SM, SC-SM 	A-1, A-2, A-4 	0 	0-3 	55-100 	50-100 	35-75 	15-40 	0-23	NP - 6
	10-14	Sandy loam, fine sandy loam, gravelly loamy sand	 SC-SM, SM 	 A-1, A-2, A-4 	 0 	0-3	 55-100 	 50-100 	 35-75 	15-40	0-23	 NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	 sc, sm 	 A-1, A-2, A-4 	 0 	0-3 	 55-100 	 50-100 	 35-80 	20-45	0-26	 NP-8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	SP-SM, GM, GP-GM, SM 	 A-1, A-2, A-3 	0 	0-25 	 30-100 	 25-100 	 20-80 	5-25	0-23	 NP - 6
	34-60	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3 	 	0-25	 30-100 	 25-100 	 15-65 	0-15	0-14	 NP
38D:			 	 		 	 	 	 			
Rosholt		Sandy loam Sandy loam, fine sandy loam, gravelly	SM SC-SM	A-2, A-4 A-1, A-2, A-4 	0 0	'	•	75-100 50-100 			0-21	
	10-14	loamy sand Sandy loam, fine sandy loam, gravelly loamy sand	 SC-SM, SM 	 A-1, A-2, A-4 	 0 	 0-3 	 55-100 	 50-100 	 35-75 	15-40	0-23 	 NP-6
	14-28	Sandy loam, fine sandy loam, gravelly loam	SM, SC	A-1, A-2, A-4 	0 	0-3	 55-100 	50-100 	35-80 	20-45	0-26	NP-8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	GM, SP-SM, SM, GP-GM	A-1, A-2, A-3 	0 	0-25 	30-100 	 25-100 	20-80 	5-25 	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	GP-GM, SP-SM, GP, SP 	A-1, A-2, A-3 	0 	0-25 	30-100 	25-100 	 15-65 	0-15	0-14 	NP

Table 23.--Engineering Index Properties--Continued

Map symbol and	 Depth 	USDA texture	Classi 	fication	Frag	ments		_	e passi umber	-	 Liquid limit	
soil name			 Unified	AASHTO	1	inches	4	10	40	200		index
	In	İ		į	Pct	Pct			İ	<u> </u>	Pct	İ
42D:	 	 	 		1	 						
Amery	0-3	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-75	25-40	0-23	NP-6
	3-22	Sandy loam,	SC-SM, SM	A-2-4, A-4	0-5	0-7	55-100	50-90	50-75	25-45	0-23	NP-7
	 	loam, gravelly loam, gravelly sandy loam	!		 	 	 	 	 	 	 	
	22-34	Sandy loam,	SC-SM, SM	A-1-b, A-2-4	0-5	0-7	55-100	50-90	35-75	15-40	0-23	NP-7
	ĺ	fine sandy	İ	A-4	İ	İ	ĺ	İ	Ì	Ì	İ	İ
		loam, gravelly										
		sandy loam										
	34-41	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4	0-5	0-7	55-100	50-90	35-75	15-40	0-23	NP-7
	!	loam, fine		A-4						!		!
		sandy loam,								!		ļ
		sandy loam										
	41-57	Gravelly sandy	SC, SM	A-2-4, A-4, A-1-b	0-5	0-7	55-100	50-90	35-75	20-45	0-28	NP-9
		loam, fine	 	A-1-D			 			1		
		sandy loam, sandy loam	l I	l I		 	 	l I		1		1
	 57_71		 SC, SM	A-2-4, A-4,	0-5	0-7	 55_100	 50-90	35-75	120-45	0-28	NTD_Q
	37-71	fine sandy	BC, BM	A-1-b	0-5	0-7	33-100 	30-30	33-73	20-45	0-20	ME - J
	<u> </u>	loam, gravelly	! 	11 1 2	1	 	 	i		i		1
	i	sandy loam		i	i	İ	! 	i	i	i	i	i
	71-80		SM, SC-SM	A-1-b, A-2-4	0-5	0-7	55-100	50-90	35-75	15-45	0-23	NP-7
	i	fine sandy		A-4	i				İ	i		i
	i	loam, gravelly	<u> </u>	į	i	İ	İ	İ	i	i	i	i
	i	sandy loam	İ	i	i	İ	İ	i	i	i	i	i

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Class	ific	catio	on		Fragi	ments		_	e passi: umber	_	 Liquid limit	
soil name		1	Unified	i	A	ASHTO			inches	4	10	40	200		index
	In	į		Ţ				Pct	Pct	<u> </u>				Pct	
43B:		 													
Antigo	0-9	Silt loam	ML, CL-ML	1	A-4			0	0-7	90-100	85-100	70-100	65-85	0-25	2-7
	9-12	Silt loam	ML, CL-ML	1	A-4			0	0-7	90-100	85-100	70-100	65-85	15-25	2-7
	12-19	Silt loam	CL-ML, CL	2	A-4			0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	19-28	Silt loam	CL, CL-ML	1	A-4			0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	28-31	Loam, sandy	CL-ML, SM,	2	A-1,	A-2,	A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		loam, fine	ML, SC-SM	ĺ				ĺ	ĺ	ĺ	ĺ	İ	İ	İ	İ
		sandy loam,													
		gravelly loam,													
		gravelly sandy													
		loam, very													
		gravelly fine													
		sandy loam													
	31-33	Very gravelly	SC-SM, SM,	ML 2	A-1,	A-2,	A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		sandy loam,													
		loam, fine													
		sandy loam,													
		gravelly loam,													
		gravelly sandy													
		loam, sandy													
		loam													
	33-60	Stratified sand	GP-GM, GP,	2	A-1,	A-2,	A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	SP-SM, SP												
		gravelly		j											
		coarse sand		Ì											

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Fragi	ments		rcentage sieve n	e passinumber	ng	 Liquid limit	
soil name			 Unified	AASHTO		inches	 4	10	40	200		index
	In	!			Pct	Pct	<u> </u>				Pct	
43C:		 	 	 	 	 	 	 	 	 		
Antigo	0-9	Silt loam	CL-ML, ML	A-4	0	0-7	90-100	85-100	70-100	65-85	0-25	2-7
_	9-12	Silt loam	ML, CL-ML	A-4	0	0-7	90-100	85-100	70-100	65-85	15-25	2-7
	12-19	Silt loam	CL, CL-ML	A-4	0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	19-28	Silt loam	CL-ML, CL	A-4	0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	28-31	Loam, sandy	SM, ML,	A-1, A-2, A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		loam, fine	SC-SM, CL-ML									
		sandy loam,										
		gravelly loam,										
		gravelly sandy										
		loam, very										
		gravelly fine										
		sandy loam										
	31-33	Very gravelly	SM, ML, SC-SM	A-1, A-2, A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		sandy loam,										
		loam, fine										
		sandy loam,										
		gravelly loam,										
		gravelly sandy										
		loam, sandy										
		loam										
	33-60	Stratified sand	•	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP									
		gravelly										
		coarse sand										

Map symbol	 Depth	USDA texture	Classif:	ication	Frag	ments		_	e passi: umber	_	 Liquid	 Plas-
and			!	!	>10	3-10					limit	ticity
soil name		<u> </u>	Unified	AASHTO		inches	4	10	40	200	<u> </u>	index
	In		 	 	Pct	Pct					Pct	
43D:			 	 			 	 	l l	 		
Antigo	0-9	Silt loam	ML, CL-ML	A-4	0	0-7	90-100	85-100	70-100	65-85	0-25	2-7
-	9-12	Silt loam	CL-ML, ML	A-4	0	0-7	90-100	85-100	70-100	65-85	15-25	2-7
	12-19	Silt loam	CL-ML, CL	A-4	0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	19-28	Silt loam	CL-ML, CL	A-4	0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	28-31	Loam, sandy	SM, SC-SM, ML	A-1, A-2, A-	· 0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		loam, fine sandy loam, gravelly loam, gravelly sandy loam, very gravelly fine sandy loam Very gravelly sandy loam, loam, fine sandy loam, gravelly loam, gravelly sandy loam, sandy	 SM, ML, SC-SM 			0-7	 	 	 35-85	 	0-30	
	33-60	loam Stratified sand to very gravelly coarse sand	 SP, GP, SP-SM, GP-GM 	 A-1, A-2, A-: 	0 	 0-7 	 45-100 	 40-95 	 15-65 	 0-15 	 0-14 	 NP
48A:					1		i	İ		İ	İ	1
Brill	0-7	Silt loam	CL-ML, CL	A-4	0	0-7	95-100	90-100	70-100	65-90	21-30	4-11
	7-11	Silt loam	CL-ML, ML, CL	A-4	0				70-100			NP-11
	11-19	Silt loam	CL-ML, CL	A-4	0	0-7	95-100	90-100	70-100	65-90	21-30	4-11
	19-34	Silt loam		A-4, A-6	0	0-7			70-100			9-15
	34-38	Loam, sandy loam, fine sandy loam, gravelly loam, gravelly sandy loam, gravelly sandy clay	İ	A-1, A-2, A	0 	0-7 			35-85 			NP - 9

	9-12	Silt loam	CL-ML, ML	A-4			0	0-7	90-100	85-100	70-100	65-85	15-25	2-7
	12-19	Silt loam	CL-ML, CL	A-4			0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	19-28	Silt loam	CL-ML, CL	A-4		ĺ	0	0-7	90-100	85-100	70-100	65-85	20-30	4-9
	28-31	Loam, sandy	SM, SC-SM, ML	A-1,	A-2,	A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
		loam, fine		ĺ		ĺ			İ	ĺ	ĺ		ĺ	İ
		sandy loam,	ĺ	İ		ĺ		ĺ	İ	ĺ	ĺ		ĺ	
i	İ	gravelly loam,	İ	İ		i		į	İ	İ	İ	İ	İ	İ
i	İ	gravelly sandy	İ	i		i		İ	i	İ	İ	İ	İ	İ
i	İ	loam, very	İ	i		i		İ	i	İ	İ		İ	İ
i	İ	gravelly fine	İ	i		i		İ	i	İ	İ		İ	İ
i	İ	sandy loam	İ	i		i		İ	i	İ	İ		İ	İ
i	31-33	Very gravelly	SM, ML, SC-SM	A-1,	A-2,	A-4	0	0-7	50-100	45-100	35-85	15-65	0-30	NP-9
i	i	sandy loam,	İ	i	-	i		i	i	i	İ	İ	İ	i
i	i	loam, fine		i		i		i	i	i	İ	İ	İ	i
i	i	sandy loam,		i		i		i	i	i	İ	İ	İ	i
	i	gravelly loam,		i		i		İ	i	İ	İ	i I	İ	İ
	i	gravelly sandy	•	i		i		i	i	i	İ	! 	İ	İ
	i	loam, sandy	İ	i		i		i	i	i	İ	! 	İ	İ
	i	loam	İ	i		i		i	i	i	İ	! 	İ	İ
	33-60	Stratified sand	SP, GP,	A-1.	A-2,	A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	SP-SM, GP-GM		•					i	i			İ
		gravelly		i		i			i	! 	! 	! 	! 	İ
		coarse sand		i		i			i	! 	! 	! 	! 	İ
				i		i			i	! 	! 	! 	! 	İ
48A:		ì		i		i			i	i İ	! 	! 	<u> </u>	İ
Brill	0-7	Silt loam	CL-ML, CL	A-4		i	0	0-7	95-100	90-100	70-100	65-90	21-30	4-11
i	7-11	Silt loam	CL-ML, ML, CL	A-4		i	0	0-7	95-100	90-100	70-100	65-100	0-30	NP-11
i	11-19	Silt loam	CL-ML, CL	A-4		i	0	0-7	95-100	90-100	70-100	65-90	21-30	4-11
i	19-34	Silt loam	CL	A-4,	A-6	i	0	0-7	95-100	90-100	70-100	65-90	28-35	9-15
i	34-38	Loam, sandy	SM, ML, SC-SM	A-1,	A-2,	A-4	0	0-7	50-100	50-100	35-85	15-65	0-30	NP-9
i	İ	loam, fine	İ	i		i			i	İ	İ		İ	İ
	i	sandy loam,	İ	i		i		į	i	İ	İ	İ	į	i
i	İ	gravelly loam,	İ	i		i		İ	i	İ	İ	İ	İ	İ
i	İ	gravelly sandy	•	i		i		İ	i	İ	İ	İ	İ	İ
			1	1		- 1		i	1	i	i		i	1

38-60 | Stratified sand | GP-GM, GP, | A-1, A-2, A-3 | 0 | 0-7 | 45-100 | 40-95 | 15-65 | 0-15 | 0-14 | NP

loam

to very

gravelly coarse sand SP, SP-SM

Table 23.--Engineering Index Properties--Continued

		!	Classif	ication	Fragi	ments		rcentag	_	ng	[Ī
Map symbol	Depth	USDA texture			!			sieve n	umber			Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct		ļ			Pct	
63A:		1	 	 		 	 	 	 	 		
Crystal Lake	0-8	Silt loam	CL, CL-ML, ML	A-4, A-6	j o	0	98-100	95-100	90-100	85-95	18-30	3-11
_	8-12	Silt loam	CL, ML, CL-ML	A-4, A-6	j o	0	98-100	95-100	90-100	85-95	18-30	3-11
	12-20	Silt loam,	CL, CL-ML	A-4, A-6	0	0	98-100	95-100	90-100	85-95	25-36	7-16
		silty clay	 	 	İ	 	 	j I	j I	į į	į I	j I
	20-32	Silt loam,	CL	A-6, A-4	i o	0	98-100	95-100	90-100	85-95	28-40	9-18
		silty clay	 			 	 	i i	İ	İ		İ
	32-60	Stratified silt	CT. MT. CTMT.	 A - 4	0	0	 98 - 100	95-100	85-100	65-95	20-30	3-10
		loam to very		 	1							
		fine sand			i	İ	İ	i	i	i	i	i
					i	İ	İ	i	i	i	i	i
63B:		İ		İ	i	İ	İ	İ	i	i	i	i
Crystal Lake	0-8	Silt loam	ML, CL-ML, CL	A-4, A-6	j o	0	98-100	95-100	90-100	85-95	18-30	3-11
_	8-12	Silt loam	ML, CL, CL-ML	A-4, A-6	j o	0	98-100	95-100	90-100	85-95	18-30	3-11
	12-20	Silt loam,	CL-ML, CL	A-4, A-6	0	0	98-100	95-100	90-100	85-95	25-36	7-16
		silty clay	 	 	į	 	 	j I	j I	j I	j I	j I
	20-32	silty clay	CL 	A-6, A-4 	0	0 	98-100	95-100	90-100	85-95 	28-40	9-18
		loam										
	32-60	Stratified silt loam to very	CL, CL-ML, ML	A-4 	0	0 	98-100	95-100 	85-100 	65-95	20-30	3-10
		fine sand		 		 	 					
63C:		 	 	 	l I	l I	l I	l I		l I		
Crystal Lake	 0-8	Silt loam	ML, CL-ML, CL	 a _ 4	0	 0	 98_100	 95-100	 90_100	 85-95	18_30	3-11
Clystal Dake		1	CL-ML, CL, ML	'	0	0 0		95-100				3-11
		1		A-4, A-6	0	0		95-100	1	1	1	7-16
	12-20 	silty clay	CL-ML, CL	A-4, A-6	0	U	 30-100	33-100	90-100	03-33	25-36	/-10
		loam	 	 	- 1	 	l I	 		I I		
	 20-32	1	 CL	 A-4, A-6	0	l l 0	 98_100	 95-100	 90_100	 85-95	28-40	9-18
	20-32	silty clay		K-4, K-0								5-10
		loam	İ	İ	Ì	İ	İ	İ	İ	İ	İ	İ
	32-60	Stratified silt	ML, CL, CL-ML	A-4	0	0	98-100	95-100	85-100	65-95	20-30	3-10
		loam to very						1				
j		fine sand										
j												

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Frag	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture	İ		i		į :	sieve n	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
					ļ		!	!	!			
63E:												
Crystal Lake	0-8 8-12	Silt loam Silt loam	CL-ML, CL, ML	,	0				90-100		18-30 18-30	3-11
		Silt loam Silt loam,	ML, CL, CL-ML CL	A-4, A-6 A-4, A-6	0				90-100 90-100		18-30 25-36	7-16
	12-20 	silty clay	CL	A-4, A-0	0	U	30-100	33-100	30-100	03-33 	25-36	/-16
	 	loam	i I	 	i	 	i	İ	<u> </u>	! 	 	!
	20-32	Silt loam,	CL	A-4, A-6	0	0	98-100	95-100	90-100	85-95	28-40	9-18
		silty clay			i	ĺ		i	i	İ		İ
	İ	loam	İ		İ	İ	i	İ	i	İ	i	İ
	32-60	Stratified silt	CL, CL-ML, ML	A-4	0	0	98-100	95-100	85-100	65-95	20-30	3-10
		loam to very										
		fine sand						[
64A: Totagatic	 0-4	Muck	 PT	 A-8	 0	 0	 100	 100	 	 	 	
TOCAGACIC	4-8	Loamy fine	SM	A-2	0	0 0	100	100	1	20-35	1	 NP-6
	1-0 	sand, loamy		A-2 	0	0	1	100	30-00	2 0-33	0-25	141 - 0
	 	sand, fine		! 		! 	i	<u> </u>	i	! 	 	!
	İ	sand, sand	<u> </u>		i	İ	i	i	i	İ	i	İ
	8-17	Fine sand,	SM	A-2	0	0	100	100	50-80	5-45	0-23	NP-6
	ĺ	sand, loamy	İ		Ì	ĺ	İ	ĺ	İ	ĺ	İ	ĺ
		sand, loamy										
		fine sand										
	17-28	Fine sand,	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-23	NP-6
		sand, loamy					!	!	!			
		sand, coarse			ļ							
		sand, mucky										
	20 46	sand Sand, fine	 SM	 A-2, A-3	 0	 0	100	100	 50-80	 5-35	0-23	INTD 6
	28-46 	sand, loamy	SM	A-2, A-3 	0	U	1 100	1 100	50-80	3-35	0-23	NP-6
	l I	sand, coarse	 	 	İ	 		l I		l I	 	l İ
	 	sand, mucky	 	 	ŀ	 	i	 		l I	 	l I
	İ	sand	<u> </u>		i	İ	i	i	i	İ	i	İ
	46-70	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80	5-45	0-23	NP-6
	j	sand, loamy	İ	İ	į	j	į	İ	į	j	į	j
		sand, fine										
		sand, loamy										
		fine sand										
	70-80	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80	5-45	0-23	NP-6
		sand, fine			1							
		sand, loamy	1	 	1	 		[
	l I	sand, loamy	[[] 	1	 	1	[[1	 		
	l I	IIIIe Sand	 	 		 		I I	 	 	 	
	I	T. Control of the Con	I	l .	1	I	1	1	1	I	1	I .

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		rcentage	_	_	Liquid	 Plas-
and	Depen	ODDIT CORCUIC	l		>10	3-10	' 	51070 11	uniber			ticity
soil name	! 		Unified	AASHTO		inches	4	10	40	200		index
	In				Pct	Pct					Pct	
64A:	 		 	 	 	 	 	 	 			
Winterfield	0-7	Loamy sand	SC-SM, SM	A-2-4	0	0	100	95-100	65-80	15-30	0-25	NP-7
		Sand, gravelly	!	A-1-b, A-2-4,	0	0		60-100			0-14	NP
	İ	sand, gravelly	•	A-3		i	İ	İ	i	i	i	İ
	ĺ	loamy sand,				İ	ĺ	ĺ	İ	İ	İ	ĺ
		loamy sand						[
69B:	 		 	 			 					
Keweenaw	0-2	Loamy sand	SC, SC-SM, SM	A-2, A-2-4	0-2	0-20	90-100	75-100	40-75	15-30	0-20	NP-10
	2-4	Sandy loam,	SC, SC-SM, SM	A-1-b, A-2,	0	0-50	85-100	65-100	45-75	15-35	0-20	NP-10
		loamy sand,		A-2-4								
		gravelly loamy						!	!			
		fine sand,										
	 	cobbly loamy	 	 	 							
	 4_16		 SC, SC-SM, SM	 a_2 a_1_h	 0	0-25	 85_100	 65-100	 45-75	15-35	0-20	 NTD_10
	4-10	gravelly loamy	•	A-2-4	U	0-25	 	03-100	43-73	13-33	0-20	
	! 	sand, cobbly			! 	i	İ	i	i	i	i	!
	İ	loamy fine	İ			i	İ	İ	i	i	i	İ
		sand, sandy										
		loam										
	16-20		•	A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SC-SM, SC					!	!	!		
		fine sand,										
	 	gravelly loamy sand	 	 	 	 	 	l I				
	 20-27		 SC, SC-SM,	 A-1-b, A-2,	 0	 0-25	 85-100	 65-100	 45-75	10-25	0-23	 NP-10
	20-27	cobbly sand,	SP-SM, SM	A-2-4	U	0-25	 	03-100	43-73	10-25	0-25	
	! 	gravelly loamy	!		! 	i	İ	İ	i	i	i	i İ
	İ	fine sand	İ	İ	İ	į	į	į	i	İ	İ	İ
	27-43	Sand, cobbly	SM, SP-SM,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80	5-20	0-27	NP-10
		loamy sand,	SC-SM, SC	A-2, A-2-4								
		gravelly loamy										
		fine sand,										
	12 75	sandy loam	 SC, SC-SM, SM	 	 0	0 25	 0E 100	 65 100	 4E 00	110 20	0-30	 NTD 10
	43-75 	Loamy sand, sandy loam,	SC, SC-SM, SM	A-1-D, A-2,	U	0-25	 82-T00	 02-T00	45-80 	10-30	0-30	NP-10
	 	fine sandy	 	A-2-4 	 	 	 	l I	 			
	! 	loam, gravelly	! 	 	 	 				1		!
	İ	loamy fine	ĺ		İ	İ	İ	İ	i	i	i	İ
	İ	sand	İ	İ		į	į	į	i	i	i	İ
	75-80	Loamy sand,	SC, SC-SM,	A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		gravelly loamy	SM, SP-SM	A-2-4								
		sand, cobbly				[ļ	ļ		!		
		sand							!	ļ		

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif:	ication	Fragi	ments	Percentage passing sieve number				 Liquid	
and					>10	3-10					limit	ticit
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
69B:		i	 	 					 			
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100	75-100	45-75	15-30	0-14	NP
	2-4	Loamy sand,	SP-SM, SM	A-1 	0 	0-15	85-100 	75-100 	40-75 	10-30	0-14	NP
	4-7	Loamy sand,	SM, SP-SM	A-1, A-3	0	0-15	70-100	50-100	25-75	3-30	0-14	NP
		sand, gravelly coarse sand,	 		 	 	 	 	 	İ		
		loamy coarse sand	 		 	 	 	 	 			
	7-14	sand, gravelly		A-1, A-3 	0 	0-15 	70-100 	50-100 	25-75 	3-30	0-14	NP
		sand, loamy coarse sand	 		 	 	 	 	 			
	14-22	Gravelly sand, loamy sand, coarse sand, loamy coarse	SP-SM, SM, SP 	A-1, A-3 	0 	0-15 	70-100 	50-100 	25-75 	3-30	0-14	NP
		sand	 				 	 	 			
	22-60	Stratified sand to very gravelly coarse sand	SP, SP-SM 	A-1 	0 	0-15 	60 - 85 	40-85 	25-45 	0-10	0-14 	NP
Vilas	0-2	Loamy sand	 SM	A-1-b, A-2-4	0-2	0	80-100	 75-100	 30-75	10-35	0-14	NP
	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	30-75	5-35	0-14	NP
	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	75-100	30-75	10-35	0-14	NP
	11-23	Sand, loamy	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-75	5-35	0-14	NP
	23-32	Sand	SP-SM, SM	A-1-b, A-2-4, A-3	0	0 	80-100	75-100	20-70	5-25	0-14	NP
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0 	80-100	75-100	20-70	5-25	0-14	NP

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	.ii	ments		rcentag sieve n	_	-	 Liquid	
and		!			>10	3-10					limit	-
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
69C:	 	 	 	 	1	 	 	 		l I		
Keweenaw	0-2	Loamy sand	SM, SC-SM, SC	A-2, A-2-4	0-2	0-20	90-100	75-100	40-75	15-30	0-20	NP-10
	2-4	Cobbly loamy	SM, SC-SM, SC	A-1-b, A-2,	0	0-50	85-100	65-100	45-75	15-35	0-20	NP-10
	 	sand, sandy loam, loamy sand, gravelly loamy fine sand	 	A-2-4 	 	 		 	 	 	 	
	4-16 	1	sm, sc-sm, sc 	A-2, A-1-b, A-2-4 	0 	0-25 	85-100 	 65-100 	45-75 	15-35 	0-20	NP-10
	16-20 	Loamy sand, cobbly loamy fine sand, gravelly loamy sand, sand	SC, SC-SM, SM, SP-SM	A-2, A-1-b 	0 	0-25 	85-100 	 65-100 	45-75 	10-25 	0-20	NP-10
	20-27 	Loamy sand, cobbly sand, gravelly loamy fine sand	SC-SM, SC	A-1-b, A-2, A-2-4 	0 	0-25 	85-100 	65-100 	45-75 	10-25	0-23	 NP-10
	27-43 	Sand, cobbly loamy sand, gravelly loamy fine sand, sandy loam	SC, SC-SM, SM, SP-SM	A-3, A-1-b, A-2, A-2-4 	0 	0-25 	85-100 	65-100 	40-80 	5-20 	0-27	NP-10
	43-75 	: -	SC, SC-SM, SM 	A-1-b, A-2, A-2-4 	0 	0-25 	 85-100 	65-100 	45-80 	10-30	0-30	 NP-10
	75-80 	1	SC-SM, SM, SP-SM, SC 	A-1-b, A-2, A-2-4	0 	0-25 	 85-100 	 65-100 	45-75 	10-25 	0-20	NP-10

			Classif	ication	Fragi	ments		rcentag	_	-		
Map symbol	Depth	USDA texture						sieve n			Plas-	
and					>10	3-10		1 10	1 40		limit	
soil name		1	Unified	AASHTO		inches	4	10	40	200	1	index
	In		 	 	Pct	Pct		 			Pct	
69C:			 	 		 		 	 			
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100	75-100	45-75	15-30	0-14	NP
	2-4	Loamy sand,	SP-SM, SM	A-1 	0	0-15	85-100	75-100	40-75	10-30	0-14	NP
	4-7	sand, gravelly coarse sand,		A-1, A-3 	0 	0-15 	70-100 	50-100 	25-75 	3-30	0-14 	NP
	7-14	sand Sand, loamy sand, gravelly sand, loamy coarse sand		 A-1, A-3 	 0 	 0-15 	 70-100 	 50-100 	 25-75 	3-30	 0-14 	 NP
	14-22	Gravelly sand, loamy sand, coarse sand, loamy coarse sand	 SP-SM, SP, SM 	 A-1, A-3 	 0 	 0-15 	 70-100 	 50-100 	 25-75 	3-30	0-14 	 NP
	22-60	Stratified sand to very gravelly coarse sand	SP, SP-SM 	A-1 	0 	0-15 	 60-85 	40-85 	 25-45 	0-10	0-14	NP
Vilas	0-2	Loamy sand	 SM	 A-1-b, A-2-4	0-2	0	80-100	 75-100	 30-75	10-35	0-14	NP
	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4, A-3	, 0 	0 	80-100	75-100	30-75	5-35	0-14	NP
	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	75-100	30-75	10-35	0-14	NP
	11-23	Sand, loamy	SP-SM, SM	A-1-b, A-2-4, A-3	i o	, 0 	80-100	75-100	20-75	5-35	0-14	NP
	23-32	Sand	SM, SP-SM	A-1-b, A-2-4, A-3	 0 	, 0 	80-100	75-100	20-70	5-25	0-14	NP
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4, A-3	 	 0 	 80-100 	75-100	20-70	5-25	0-14	 NP

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

			Classif	Classification		Fragments		rcentag				
Map symbol	Depth	USDA texture			_			sieve n			Plas-	
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	ļ	[!	Pct	Pct	ļ	ļ	!	ļ	Pct	!
69E:	 	1	 	 -		 	 					
Keweenaw	0-2	Loamy sand	SM, SC, SC-SM	 a_2 a_2_4	0-2	 0-20	 90_100	 75-100	 40-75	15-30	0-20	 NP-10
Non-cellan	2-4	Loamy sand,	SM, SC-SM, SC		0	1		65-100				NP-10
	, 	gravelly loamy	1	A-2-4							0 20	
	! 	fine sand,	i	 	i		! 	i	i	i		i
	İ	sandy loam,	i		i	İ	İ	i	i	i	i	i
	İ	cobbly loamy	İ	İ	i	İ	İ	İ	i	i	i	i
	İ	sand	İ	İ	i	İ	j	i	i	i	İ	i
	4-16	Sandy loam,	SC, SC-SM, SM	A-2, A-1-b,	0	0-25	85-100	65-100	45-75	15-35	0-20	NP-10
		cobbly loamy		A-2-4								
		fine sand,										
		loamy sand,										
		gravelly loamy										
		sand										
	16-20		SC, SM,	A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SC-SM, SP-SM						!			
		fine sand,							!			!
	 	gravelly loamy sand	 	 		 	 					
	 20-27		SC-SM, SC,	 A-1-b, A-2,	0	 0-25	 05_100	 65-100	 45-75	10-25	0-23	 NP-10
	20-27	cobbly sand,	SM, SP-SM	A-1-D, A-2,	0	0-25	 03-100	102-100	45-75	10-25	0-23	NP-10
	 	gravelly loamy		A-2-4 		 	 	 		1		
	 	fine sand	 	 	1	 	 	 	i	1		i
	27-43		SC-SM, SC,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80	5-20	0-27	NP-10
	İ	loamy sand,	SM, SP-SM	A-2, A-2-4	i			İ	i			i
	İ	gravelly loamy	İ	İ	i	İ	İ	İ	i	i	i	i
	İ	fine sand,	İ	İ	i	İ	İ	į	i	İ	İ	İ
	ĺ	sandy loam	İ		ĺ	ĺ	ĺ	ĺ	İ	İ	İ	İ
	43-75	Loamy sand,	SC, SC-SM, SM	A-1-b, A-2,	0	0-25	85-100	65-100	45-80	10-30	0-30	NP-10
		sandy loam,		A-2-4								
		fine sandy										
		loam, gravelly										
		loamy fine										
		sand										
	75-80		1	A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		gravelly loamy	SC-SM, SC	A-2-4				[1		
		sand, cobbly								1		
	l	sand	I	l						1		

		Tab	ole 23Engin	eering Index	Propertie	sCont:	inued				
			Classi	fication	Fragi	ments	Percent	age passi	ing	Ī	1
Map symbol	Depth	USDA texture	İ		i		sieve	number	-	Liquid	Plas-
and	ĺ	İ			>10	3-10				limit	ticity
soil name	ĺ	İ	Unified	AASHTO	inches	inches	4 10	40	200	Ì	index
	In				Pct	Pct		Ī		Pct	Ī
69E:	ĺ	İ		İ	İ	İ	į į	j	ĺ	İ	İ
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100 75-1	00 45-75	15-30	0-14	NP

Map symbol	 Depth	USDA texture					sieve number					 Plas- ticity
and soil name	 		Unified	AASHTO		3-10 inches	 4	10	40	200	limit	ticity index
BOII Hame	 In	<u> </u>		AADIIIO	Pct	Pct	<u> </u>	1	40	1 200	Pct	Index
				! 		100	! 	! 		i	100	i
69E:	İ			<u> </u>	İ	İ	İ	İ	İ	i	İ	i
Sayner	0-2	Loamy sand	SM	A-1	0-2	0-15	85-100	75-100	45-75	15-30	0-14	NP
	2-4	Loamy sand,	SP-SM, SM	A-1	0	0-15	85-100	75-100	40-75	10-30	0-14	NP
		sand										
	4-7	Loamy sand,	1 -	A-1, A-3	0	0-15	70-100	50-100	25-75	3-30	0-14	NP
	 -	sand, gravelly coarse sand,	l I	l I	 	 	 	 	 			
	 	loamy coarse	 	 	 	 	l I	l I	 			
	 	sand	 	 	İ	 	 	! [l I	i		i
	7-14	Sand, loamy	SM, SP-SM	A-1, A-3	0	0-15	70-100	50-100	25-75	3-30	0-14	NP
	İ	sand, gravelly	j	İ	į	j	j	į	į	i	į	į
		sand, loamy										
		coarse sand										
	14-22	-	SM, SP, SP-SM	A-1, A-3	0	0-15	70-100	50-100	25-75	3-30	0-14	NP
		loamy sand,										
	 	coarse sand,	 	 	l I	 	l I	l I	 			
	 	sand	 	 	l I	 	 	l I	 			
	22-60	Stratified sand	SP, SP-SM	 A-1	0	0-15	60-85	40-85	25-45	0-10	0-14	NP
	İ	to very	İ		İ	İ	İ	İ	İ	i	i	i
		gravelly	ĺ	İ	ĺ	ĺ		ĺ	ĺ	İ	İ	İ
		coarse sand										
Vilas	0-2	Loamy sand Loamy sand	•	A-1-b, A-2-4 A-1-b, A-2-4,	0-2			75-100 75-100			0-14	NP NP
	2- 1 	Loamy sand	SM, SP-SM	A-1-D, A-2-4,	0	U	80-100	/3-100 	30-75	5-35	0-14	NP
	4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	 75-100	30-75	10-35	0-14	NP
		Sand, loamy	1	A-1-b, A-2-4,		0		75-100		5-35	0-14	NP
	j	sand	j	A-3	İ	İ	j	j	į	j	į	į
	23-32	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	75-100	20-70	5-25	0-14	NP
				A-3								
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	75-100	20-70	5-25	0-14	NP
	 -		l I	A-3	 	 	 	 	 			
74B:	 		 	 	l I	 	 	l I	l I			
Vilas	0-2	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	75-100	30-75	10-35	0-14	NP
	2-4	Loamy sand	SM, SP-SM	A-1-b, A-2-4,	0			75-100			0-14	NP
				A-3								
	•	Loamy sand	SM	A-1-b, A-2-4	0			75-100			0-14	NP
	11-23	Sand, loamy	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	75-100	20-75	5-35	0-14	NP
	22.20	sand	an aw aw	A-3		 0	00 100	 75 100				370
	23-32	bdnQ	SP-SM, SM	A-1-b, A-2-4, A-3	0	l O	 80-100	75-100	∠U - /U 	5-25	0-14	NP
	 32-80	Sand	SP-SM, SM	A-3 A-1-b, A-2-4,	 0	l l 0	80-100	 75-100	20-70	5-25	0-14	 NP
				A-3	į							
	İ	İ	į		į	j	İ	į	į	i	j	į

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture					:	sieve n	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
								ļ				
74C:												
Vilas	0-2	Loamy sand	SM	A-1-b, A-2-4	0	0		75-100			0-14	NP
	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100	75-100	30-75	5-35	0-14	NP
		 	l and	A-3	 0	 0				110 25	0-14	
		Loamy sand	SM	A-1-b, A-2-4	-			75-100			1	NP
	11-23	Sand, loamy sand	SP-SM, SM	A-1-b, A-2-4, A-3	0	0	80-100	75-100	20-75	5-35	0-14	NP
	 23-32	1	ar ar ar	1	 0	 0	 00 100	 75-100	100 70	5-25	0-14	 NP
	23-32	Sand	SM, SP-SM	A-1-b, A-2-4, A-3	0	0	80-100	/5-IUU	20-70	3-25	0-14	NP
	 32-80		ar ar	A-3 A-1-b, A-2-4,	 0	 0	 00 100	 75-100	100 70	5-25	0-14	 NP
	32-80	Sand	SM, SP-SM	A-1-D, A-2-4,	0	0	80-100	/5-IUU	20-70	3-25	0-14	NP
	 			A-3	l I		 	l I	 	-		
74D:	l I		 		l I	 	l I	l I	l I			l I
Vilas	0-2	Loamy sand	SM	A-1-b, A-2-4	 0	 0	 80_100	 75-100	 30-75	10-35	0-14	 NP
VIIAS	2-4	Loamy sand	SP-SM, SM	A-1-b, A-2-4,		0		75-100		5-35	0-14	NP
	2 -4	Loamy Sand	BF-BM, BM	A-3	0		00 - 1 00	73-100 	30-73	3-33	0-14	112
	 4-11	Loamy sand	SM	A-1-b, A-2-4	0	0	 80 - 100	 75-100	 30-75	10-35	0-14	 NP
		Sand, loamy	SM, SP-SM	A-1-b, A-2-4,	-	0		75-100		5-35	0-14	NP
		sand		A-3								
	23-32	Sand	SP-SM, SM	A-1-b, A-2-4,	0	0	80-100	75-100	20-70	5-25	0-14	NP
				A-3	i	i		İ	i			İ
	32-80	Sand	SM, SP-SM	A-1-b, A-2-4,	0	0	80-100	75-100	20-70	5-25	0-14	NP
	İ	İ		A-3	İ	i	İ	İ	İ	i	i	İ
	İ	İ	İ	i	i	į	j	į	į	i	i	į
100B:	ĺ				ĺ	İ	ĺ	ĺ	ĺ	İ	İ	ĺ
Menahga	0-2	Sand	SM	A-2, A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
	2-25	Sand, loamy	SM	A-2, A-3	0	0	95-100	85-100	55-75	5-20	0-14	NP
		sand										
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
		sand										
100C:												
Menahga	0-1	Slightly	PT	A-8	0	0	100	100				
		decomposed										
		plant material	1		!				!	!		
	1-2	Sand	SM	A-2, A-3	0	0		85-100		5-15	0-14	NP
	2-25	Sand, loamy	SM	A-2, A-3	0	0	95-100	85-100	55-75	5-20	0-14	NP
		sand										
	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
		sand							ļ	-		

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth 	USDA texture	Classi 	fication	Fragi	ments	Percentage passing sieve number				 Liquid	
and		!	!		>10	3-10	ļ				limit	
soil name		<u> </u>	Unified	AASHTO	inches	inches	4	10	40	200		index
ļ	In				Pct	Pct					Pct	!
100D:		 	 		 	 			 			
Menahga	0-1	Slightly	 PT	 A-8	0	0	100	100	 			
menanga	0-1	decomposed		1	0	0	1 100	1 100	 			
ļ		plant material	! 		i i	 	i	i	İ	İ		i
ļ	1-2	Sand	 SM	A-2, A-3	0	0	95-100	85-100	 55-70	5-15	0-14	NP
i		Sand, loamy	SM	A-2, A-3	0	0		85-100		1	0-14	NP
i		sand								5 25		
i	25-80	Sand, coarse	SM	A-2, A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
į		sand			i	İ						
 127D:		[[
Amery	0-3	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	 85-100	75-98	 50-75	25-40	0-23	NP-6
imery	3-22		SC-SM, SM	A-2-4, A-4	0-5		1	1		25-45		1
i		loam, gravelly									0 20	/
i		loam, gravelly	!	i	i	! 	i	i	i	i	i	i
i		sandy loam	İ	i	i	! 	i	i	i	i	i	i
i	22-34		SM, SC-SM	A-1-b, A-2-4,	0-5	0-7	55-100	50-90	35-75	15-40	0-23	NP-7
i		fine sandy		A-4	i				İ	i		i
i		loam, gravelly			i	i	i	i	i	i	i	i
i		sandy loam			i	i	i	i	i	i	i	i
į	34-41	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0-5	0-7	55-100	50-90	35-75	15-40	0-23	NP-7
į		loam, fine	İ	A-4	i	i	i	i	į	i	i	i
į		sandy loam,	İ	į	i	i	i	i	į	i	i	i
į		sandy loam	İ	i	i	į	i	i	į	i	i	i
j	41-57	Gravelly sandy	SC, SM	A-2-4, A-4,	0-5	0-7	55-100	50-90	35-75	20-45	0-28	NP-9
j		loam, fine	İ	A-1-b	İ	į	İ	į	į	İ	İ	İ
į		sandy loam,	İ	j	İ	į	į	į	į	İ	İ	İ
j		sandy loam	İ	j	İ	į	İ	į	į	İ	İ	İ
į	57-71	Sandy loam,	SC, SM	A-2-4, A-4,	0-5	0-7	55-100	50-90	35-75	20-45	0-28	NP-9
ĺ		fine sandy	İ	A-1-b	İ	İ	İ	İ	ĺ	İ	İ	ĺ
ĺ		loam, gravelly	İ	İ	İ	İ	İ	İ	ĺ	İ	İ	ĺ
į		sandy loam			[
ĺ	71-80	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0-5	0-7	55-100	50-90	35-75	15-45	0-23	NP-7
ĺ		fine sandy		A-4								
ĺ		loam, gravelly										
I		sandy loam			I				I	1	1	

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	Frag	ments		rcentag sieve n	_	_	 Liquid	 Plas
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
127D:												
Rosholt	0-4	Sandy loam	SM	A-2, A-4	1-5	0-3	80-100	75-100	50-75	25-40	0-21	NP-4
	4-10	Sandy loam, fine sandy	SC-SM, SM	A-1, A-2, A-4	0	0-3	55-100	50-100	35-75	15-40	0-23	NP - 6
	 10-14	loam, gravelly loamy sand Sandy loam,	 SM, SC-SM	 A-1, A-2, A-4		 0-3	 55-100	 50-100	 35-75	 15-40	 0-23	 NP-6
		fine sandy loam, gravelly										
	 14-28 	fine sandy loam, gravelly	SM, SC	 A-1, A-2, A-4 	0	 0-3 	 55-100 	 50-100 	 35-80 	20-45	0-26	 NP-8
	 28-34 	loam Gravelly loamy sand, very gravelly coarse sand,	 SM, GP-GM, GM, SP-SM 	 A-1, A-2, A-1 	 	 0-25 	 30-100 	 25-100 	 20-80 	 5-25 	 0-23 	 NP - 6
	 34-60 	sand Stratified sand to very gravelly coarse sand	 SP-SM, GP, GP-GM, SP 	A-1, A-2, A-: 	 	 0-25 	 30-100 	 25-95 	 15-65 	 0-15 	 0-14 	 NP

Map symbol	Depth	USDA texture	Classi	fication	Fragi	ments		_	e passi umber	_	 Liquid	 Plas-
and		İ	ĺ		>10	3-10	İ				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In			1	Pct	Pct					Pct	
127E:												
Amery	0-3	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-75	25-40	0-23	NP-6
	3-22 	Sandy loam, loam, gravelly loam, gravelly sandy loam	1	A-2-4, A-4 	0-5 	0-7 	55-100 	50-90 	50-75 	25-45 	0-23	NP - 7
	22-34 	Sandy loam, fine sandy loam, gravelly sandy loam	SM, SC-SM 	A-1-b, A-2-4, A-4 	0-5 	0-7 	55-100 	50-90 	35-75 	15-40 	0-23	NP - 7
	34-41 	Gravelly sandy loam, fine sandy loam, sandy loam	SC-SM, SM 	A-1-b, A-2-4, A-4 	0-5 	0-7 	55-100 	50-90 	35-75 	15-40 	0-23	NP - 7
	41-57	Gravelly sandy loam, fine sandy loam, sandy loam	sc, sm 	A-2-4, A-4, A-1-b	0-5 	0-7	55-100 	50-90	35-75	20-45	0-28	NP - 9
	57-71 	Sandy loam, fine sandy loam, gravelly sandy loam	SC, SM	A-2-4, A-4, A-1-b	0-5	0-7	55-100 	50-90	35-75	20-45	0-28	NP - 9
	71-80	Sandy loam,	SC-SM, SM	A-1-b, A-2-4,	0-5	0-7	55-100	50-90	35-75	15-45	0-23	NP-7

A-4

fine sandy

loam, gravelly sandy loam

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif:	icati	on		Fragi			rcentage sieve n	-	ng	Liquid	
and soil name		 	Unified	 2\	ASHTO		>10	3-10	 4	10	40	200	limit	ticity index
SOII Hame	In	<u> </u>			ABHIO		Pct	Pct	=	10	10	200	Pct	IIIdex
		į	İ	ĺ					į	ĺ		į	į	į
127E: Rosholt	0 - 4	 Sandy loam	 SM	 A-2,	A _ 4		1-5	 0-3	 80-100	 75-100	 50-75	 25_40	0-21	 NTD _ 4
RODIIOIC	4-10		•		A-2,	A-4			55-100				1	1
		fine sandy		/	,								0 20	
		loam, gravelly						İ	İ	İ	i	i		i
		loamy sand	İ	İ			i	İ	į	į	İ	į	İ	i
	10-14	Sandy loam,	SM, SC-SM	A-1,	A-2,	A-4	0	0-3	55-100	50-100	35-75	15-40	0-23	NP-6
		fine sandy												
		loam, gravelly												
		loamy sand												
	14-28		SC, SM	A-1,	A-2,	A-4	0	0-3	55-100	50-100	35-80	20-45	0-26	NP-8
		fine sandy										!		!
		loam, gravelly												
	20 24	loam	ar ar		3 0	3 2	•	0.05	 30-100	 0F 100				
	28-34	Gravelly loamy sand, very	GP-GM, GM	A-1,	A-2,	A-3	0	U-25 	30-100	25-100	20-80 	5-25	0-23	NP-6
		gravelly	GF-GM, GM	 				 	 	 		 		
		coarse sand,	! [! 				 	 	l I	 	İ		i
		sand						! 	İ	İ	i	i		i
	34-60	Stratified sand	SP-SM, GP,	A-1,	A-2,	A-3	0	0-25	30-100	25-95	15-65	0-15	0-14	NP
		to very	GP-GM, SP	İ			İ	İ	j	j	İ	j	j	į
		gravelly												
		coarse sand												
156B:		 	 	 				 	 	 	 	 		
Magnor, very		İ	İ	İ			i	İ	į	į	İ	į	İ	i
stony	0 - 4	Silt loam	CL-ML, CL, ML	A-4			0-2	0-5	90-100	85-100	80-100	70-90	20-33	3-10
	4-11	Silt loam	CL, ML, CL-ML	A-4			0-2	0-5	90-100	85-100	80-100	70-90	16-27	2-8
		Silt loam	CL-ML, CL, ML				0-2	'	90-100					3-9
		Silt loam	CL, CL-ML, ML				0-2		90-100				,	3-10
	21-39		•	A-1,	A-2,	A-4	0-5	0-7	55-100	50-90	30-80	15-70	18-29	3-11
		fine sandy	SC-SM,											
		loam, gravelly	•	 				 		 	l	 		
		sandy loam,	CL-ML	 				 	 	 		 		
	39-58	1	CL-ML, CL,	 Δ = 1	Δ-2	Δ-4	0-5	 0-7	 55-100	 50-90	 30-80	 15-70	 18-29	3-11
	33 30	loam, sandy	SC-SM, SM,	,	,			, o ,	33 100	30 30	50 00	1	10 25	3 11
		loam, gravelly		 				! 	İ	İ	i	i		i
		sandy loam,		İ				İ	İ	İ	i	İ	i	i
j		loam							İ	İ		İ	İ	į
j	58-60	Fine sandy	SM, SC-SM	A-1,	A-2		0-5	0-7	55-100	50-90	30-60	15-30	0-26	NP-9
		loam, sandy												
		loam, gravelly												
		fine sandy							ļ	ļ		ļ		!
		loam												

Map symbol	 Depth	USDA texture	Classif	icatio	on		İ	ments		rcentag sieve n	e passi: umber	ng	 Liquid	
and							>10	3-10	ļ				limit	
soil name		<u> </u>	Unified	A.	ASHTO		inches	inches	4	10	40	200		index
	In						Pct	Pct				[Pct	
156B:	 			 			 		 	 	 	 		
Magnor	0-8	Silt loam	CL-ML, ML, CL	A-4			0-2	0-5	90-100	85-100	80-100	70-90	20-34	3-11
	8-11	Silt loam	CL, ML, CL-ML	A-4			0-2	0-5	90-100	85-100	80-100	70-90	16-27	2-8
	11-16	Silt loam	CL, CL-ML, ML	A-4			0-2	0-5	90-100	85-100	80-100	70-90	17-26	3-9
	16-21	Silt loam	ML, CL, CL-ML	A-4			0-2	0-5	90-100	85-100	80-100	70-90	18-27	3-10
	21-39	Sandy loam,	SM, CL-ML,	A-1,	A-2,	A-4	0-5	0 - 7	55-100	50-90	30-80	15-70	18-29	3-11
	ĺ	fine sandy	SC, ML, CL,	ĺ				İ	ĺ	İ	İ	İ	İ	ĺ
	ĺ	loam, gravelly	SC-SM	ĺ				İ	ĺ	İ	İ	İ	İ	İ
	İ	sandy loam,	İ	İ			İ	į	į	İ	İ	į	İ	į
	İ	loam	İ	İ			İ	į	į	İ	İ	į	İ	į
	39-58	Fine sandy	ML, CL, SC,	A-1,	A-2,	A-4	0-5	0-7	55-100	50-90	30-80	15-70	18-29	3-11
	İ	loam, sandy	SM, CL-ML,	i				i	į	i	i	i	i	i
	İ	loam, gravelly	SC-SM	i				i	į	i	i	i	i	i
	İ	sandy loam,	i	i			İ	i	i	i	i	i	i	i
	İ	loam	i	i			İ	i	i	i	i	i	i	i
	58-60	Fine sandy	SC-SM, SM	A-1,	A-2		0-5	0-7	55-100	50-90	30-60	15-30	0-26	NP-9
	İ	loam, sandy	i	į į				i	İ	İ	i	i	i	i
	İ	loam, gravelly	İ	i				i	İ	İ	i	i	i	İ
	İ	fine sandy	İ	i				i	İ	İ	i	i	i	i
	į	loam	İ					į	į	İ	į	į	į	į
157B:	 	l I	 	 					 					
Freeon, very	İ		i	i			! 	<u> </u>	İ	i	i	i		i
stony	0-4	Silt loam	ML, CL-ML, CL	A-4			0-2	0-5	90-100	85-100	80-100	70-90	20-34	3-11
-	4-19	Silt loam	ML, CL-ML, CL	A-4			0-2	0-5	90-100	85-100	80-100	70-90	16-30	2-11
	19-39	Sandy loam,	CL-ML, SC,	A-1,	A-2,	A-4	0-5	0-7	60-100	50-90	30-90	15-70	18-29	3-11
	İ	gravelly loam	SC-SM, CL,	į į				i	İ	İ	i	i	i	i
	İ		ML, SM	i			İ	i	i	i	i	i	i	i
	39-53	Sandy loam,		A-1,	A-2,	A-4	0-5	0-7	60-100	50-90	30-90	15-70	0-26	NP-9
		gravelly loam,		i	•							i		i
	İ	fine sandy	CL-ML, ML	İ			İ	i	i	i	i	i	i	i
	İ	loam	į	İ			İ	i	i	i	i	i	i	i
	53-80		SM, SC-SM	A-1,	A-2		0-5	0-7	60-100	50-90	30-90	15-35	0-26	NP-9
		gravelly fine		į ,				i		i	i	i		İ
	i	sandy loam	i	i				i	i	i	i	i		i
	İ	1	İ	İ			İ	i	į	i	i	i	i	i

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication		İ	ments		rcentago sieve n	e passi: umber	ng	Liquid	
and soil name		 	Unified	AASHTO		>10	3-10	 4	10	40	200	limit	ticity index
BOII Hame	In	<u> </u>	Unitied	AADIITO		Pct	Pct	*	1	40	200	Pct	Index
j	İ	İ	İ	İ		İ	į	į	İ	į	j	į	İ
157B:													
Freeon	0 - 4	Silt loam	CL, CL-ML, ML			0-2	1			80-100		1	3-11
		Silt loam	ML, CL, CL-ML			0-2				80-100			2-11
	19-39 	Sandy loam, gravelly loam	SC, CL, CL-ML, ML, SC-SM, SM	A-1, A-2, 	A-4	0-5	0-7	60-100 	50-90 	30-90	15-70 	18-29	3-11
	 39-53 	Sandy loam, gravelly loam, fine sandy	CL, CL-ML,	 A-1, A-2, 	A-4	 0-5 	 0-7 	 60-100 	 50-90 	 30-90 	 15-70 	0-26	 NP-9
	 53-80 	loam Sandy loam, gravelly fine sandy loam	 SC-SM, SM 	 A-1, A-2 		 0-5 	 0-7 	 60-100 	 50-90 	 30-90 	 15-35 	 0-26 	 NP-9
157C:		 		 		 	 	l I	 	 	 		
Freeon, very		ì	i	i I		i	<u> </u>	İ	i	i	i		i
stony	0-4	Silt loam	CL-ML, ML, CL	A-4		0-2	0-5	90-100	85-100	80-100	70-90	20-34	3-11
•	4-19	Silt loam	CL-ML, ML, CL	A-4		0-2	0-5	90-100	85-100	80-100	70-90	16-30	2-11
	19-39 	Sandy loam, gravelly loam	CL-ML, ML, SC, SC-SM,	A-1, A-2, 	A-4	0-5	0-7	60-100	50-90	30-90	 15-70 	18-29	3-11
	39-53 	Sandy loam, gravelly loam, fine sandy loam	CL, CL-ML,	 A-1, A-2, 	A-4	 0-5 	 0-7 	 60-100 	 50-90 	30-90 	 15-70 	0-26	 NP - 9
	53-80		SM, SC-SM 	 A-1, A-2 		0-5	0-7 	 60-100 	 50-90 	30-90 	 15-35 	0-26	 NP - 9
Freeon	0-4	 Silt loam	CL, CL-ML, ML	 A-4		0-2	0-7	 90-100	85-100	 80-100	 70-90	20-34	3-11
	4-19	Silt loam	CL, ML, CL-ML	A-4		0-2	0-5	90-100	85-100	80-100	70-90	16-30	2-11
	19-39 	Sandy loam, gravelly loam	ML, CL-ML, CL, SM, SC, SC-SM	A-1, A-2, 	A-4	0-5	0-7 	60-100 	50-90 	30-90 	 15-70 	18-29	3-11
	39-53	Sandy loam, gravelly loam, fine sandy loam	ML, SM, CL-ML, CL, SC-SM, SC	A-1, A-2, 	A-4	0-5 	0-7 	60-100 	50-90 	30-90 	15-70 	0-26	NP - 9
	53-80	Sandy loam, gravelly fine sandy loam	SC-SM, SM	 A-1, A-2 		0-5	0-7 	60-100 	50-90 	30-90 	15-35 	0-26	NP - 9

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Fragi	ments		rcentag	_	-	 Liquid	 Plas-
and	į	İ			>10	3-10	i				limit	
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct		ļ			Pct	
160A:	 			 	 	 	 	 				
Oesterle	0-7	Sandy loam	SC, SM, SC-SM	A-2, A-4	0	0-9	85-100	80-100	55-80	30-45	18-26	3-8
	7-11	Sandy loam,	SM, SC	A-2, A-4	0	0-9	75-100	70-100	50-80	25-45	18-26	3-8
		loam, gravelly										
		fine sandy										
		loam										
	11-31	Sandy loam,	SC, SM	A-1, A-2, A-4	0	0-9	55-100	50-100	35-75	15-40	0-28	NP-9
		gravelly loam,										
		fine sandy										
	21 60	loam Stratified sand	CD CD CM	 A-1, A-2, A-3	 0	 0-9	 30-100		115 65	0-15	0-14	 NP
	31-60	to very	SP, GP-GM	A-1, A-2, A-3 	0	U-9 	120-100	23-33 	122-02	0-15	0-14	NP
	 	gravelly	517 61 611	 	i i	 	i	i i	i i	i		i
	 	coarse sand		! 		! 	i	<u> </u>	i	i		
	İ		<u> </u>	 	i	İ	i	i	İ	i	i	İ
182B:	į	İ	İ	İ	į	į	İ	į	İ	i	į	į
Padus	0-2	Sandy loam	SM	A-1-b, A-2,	0	0-7	80-100	75-100	30-90	20-50	0-21	NP-4
				A-4								
	2-3	Sandy loam,	SM, SC-SM	A-1-b, A-2,	0	0-7	80-100	75-100	30-90	20-60	0-23	NP-6
		fine sandy		A-4								
		loam, loam										
	3-19	Sandy loam,	SC, SC-SM, SM		0	0-7	80-100	75-100	30-90	20-60	0-26	NP - 8
		loam, fine		A-4		 						
	1006	sandy loam Sandy loam,	SC-SM, SC, SM	 	 0	 0-7	 EE 100	 EO 100	20 00	 15-55	0-28	 NTD O
	19-20	gravelly loam,	SC-SM, SC, SM	A-1, A-2, A-1 	0	0-7	33-100	30-100	30-90	122-33	0-28	NF - 3
	 	fine sandy	i I	 	i i	 	i	i i	i i	i		İ
		loam	i	 	i		i	i	i	i		i
	26-38	Sandy loam,	SC-SM, SM,	A-1, A-2, A-4	0	0-7	55-100	50-100	30-90	15-55	0-28	NP-9
	į	gravelly loam,	CL-ML, SC	İ	į	į	İ	į	İ	i	į	į
	ĺ	fine sandy	İ		ĺ	ĺ	İ	ĺ	ĺ	İ	İ	ĺ
		loam										
	38-60	Stratified sand	GP-GM, SP-SM,	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
		to very	SP, GP									
		gravelly			!			!				
	ļ	coarse sand			ļ		!	ļ				ļ

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		rcentag sieve n	_	-	 Liquid	 Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
182C:		 		 	 	 						
Padus	0-2	Sandy loam	SM	A-1-b, A-2, A-4	0 	0-7 	80-100 	75-100 	30-90 	20-50	0-21	NP - 4
	2-3	Sandy loam, fine sandy loam, loam	SC-SM, SM	A-1-b, A-2, A-4	0 	0-7 	80-100 	75-100 	30-90 	20-60	0-23	NP - 6
	3-19	Sandy loam, loam, fine sandy loam	SC, SC-SM, SM	A-1-b, A-2, A-4	0 	0-7 	 80-100 	75-100 	30-90	20-60	0-26	NP - 8
	19-26	Sandy loam, gravelly loam, fine sandy loam	SM, SC-SM, SC 	A-1, A-2, A-4 	0 	0-7 	 55-100 	50-100 	30-90	15-55 	0-28	NP - 9
	26-38	Sandy loam, gravelly loam, fine sandy loam	CL-ML, SC-SM, SC, SM	A-1, A-2, A-4 	0 	0-7 	 55-100 	50-100 	30-90 	15-55 	0-28	NP - 9
	38-60	Stratified sand to very gravelly coarse sand	GP-GM, GP, SP-SM, SP 	A-1, A-2, A-3 	0 	0-15 	45-100 	40-95 	15-65 	0-15	0-14 	NP

			Classi	fication	Frag	ments	Pe	rcentag	ge passi	ng		
Map symbol	Depth	USDA texture			_			sieve r	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name		ĺ	Unified	AASHTO	inches	inches	4	10	40	200	Ì	index
-	In				Pct	Pct					Pct	

Map symbol	Depth	USDA texture			Flagi	ments		sieve n	umber	.19	 Liquid	 Plas-
and		!	!		>10	3-10					limit	ticity
soil name	<u> </u>		Unified	AASHTO	<u> </u>	inches	4	10	40	200	<u> </u>	index
	In				Pct	Pct					Pct	
192A:	 	 	 	l I	[[
Worcester	0-2	Sandy loam	SM	 A-2-4, A-4	 0	0-7	 80 - 100	 75-100	 45-90	 25-50	0-26	 NP-8
WOLCOBECT	2-3	Sandy loam,	SM, SC-SM	A-1-b, A-2-4,					35-95		1	
		loam, gravelly	1 -	A-4	i	ĺ		İ				İ
	j	fine sandy	j	İ	į	İ	İ	j	į	İ	į	j
		loam										
	3 - 6	Sandy loam,		A-1-b, A-2-4,	0	0-7	55-100	50-100	35-95	15-55	0-26	NP-8
	 	loam, gravelly		A-4				 				
	 	fine sandy loam	 	 	 	l I	l I	l I	l I	 	 	
	 6-16	1	SC, SC-SM, SM	 A-1-b, A-2-4,	0	0-7	 55-100	 50-100	 35-95	 15-55	0-26	 NP-8
		loam, gravelly	•	A-4	İ			ĺ				ĺ
		fine sandy	ĺ	ĺ	ĺ	ĺ		ĺ	ĺ		İ	
		loam			[
	16-20		SC, CL-ML,	A-1-b, A-2-4,	0	0-7	55-100	50-100	35-95	15-55	18-28	3-9
	 	loamy sand, gravelly loam	SM, SC-SM	A-4	 	l I	l I	l I	 	 	 	
	20-32		SM, SC,	A-1-b, A-2-4,	0	0-7	 55-100	50-100	 35-95	15-55	18-28	3-9
		fine sandy	•	A-4	İ			ĺ				
		loam, gravelly										
		loam	!		!							
	32-39	Gravelly loamy	GM, SM	A-1-a, A-2-4, A-3	0	0-7	45-100	40-95	20-70	0-25	0-18	NP-3
	 	sand, very gravelly	 	A-3 	l I	l I	l I	 	 	 	 	
	 	coarse sand		! 		 		! 				!
	39-60	Stratified sand	SP-SM, SP,	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP	ĺ	ĺ	ĺ		ĺ	ĺ		İ	
		gravelly	!		!							
	 	coarse sand						 				
193A:	 	 	 	 	l I	l I	l I	 	 	 	 	
Minocqua	0-4	Muck	PT	 A-8	0	0	100	100	100	100		NP
-	4-15	Silt loam,	ML, CL, SC,	A-2, A-4	0	0-7	80-100	75-100	45-100	25-90	0-35	NP-13
		loam, sandy	SM									
		loam, fine			[
	 	sandy loam,						 				
	 	very fine sandy loam	 	 	 	 		 	 		 	
	15-28	Loam, gravelly	ML, SC, CL,	 A-1, A-2, A-4	0	0-7	 55-100	50-100	30-95	15-80	0-28	 NP-9
	İ	sandy loam,	SM	İ	i	İ	i	j	İ		İ	j
		fine sandy	[
		loam										
	28-60	Stratified sand	GP, SP, GP-GM, SP-SM	A-1, A-2, A-3	0	0-7	45-100	40-95 	15-65	0-15	0-14	NP
	 	to very gravelly	GP-GM, SP-SM	 	 	 		 	 	 	 	
	<u> </u>	coarse sand			İ	İ	i	İ	İ			

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	İ	ments		rcentag sieve n	_	-	Liquid	
and soil name			Unified	AASHTO	>10	3-10 inches		10	40	200	limit	ticity index
soli name	1	1	Unified	AASHTO		Inches Pct	4	1 10	40	200		Index
	In	1	 	 	Pct	PCt 	 	 	l I		Pct	
215B:	 				 	 	i	i i	 	i		i
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
		loam, fine										
		sandy loam,	!	!	[
		loamy sand										
	8-15	Gravelly sandy loam, sandy	SC-SM, SM	A-1-b, A-2-4, A-4	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
	 	loam, loam,	 	A-4	 	 	 	 	l I	I		
	 	fine sandy				 	i	İ		i		
	İ	loam			İ	İ	i	İ	İ	i	i	i
	15-21	Gravelly coarse	SP-SM, GP-GM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70	2-30	0-14	NP
		sand, loamy	SM, GM									
	!	sand, sand,			!		!	!				!
		loamy fine										
	21_60	sand Stratified sand	 GD_GM_GD	 A-1, A-2, A-3	 0	 0_15	 45-100	 40-95	 15_65	0-15	0-14	 NP
	21-00	to very	SP, GP-GM	N-1, N-2, N-3	0	0-15		10-55	13-03	0-13	0-14	112
	i	gravelly			İ	<u> </u>	i	i	İ	i	i	i
	į	coarse sand	j	j	İ	į	į	į	j	j	į	į
					ļ							
215C: Pence	 0-3	 Sandy loam	 SM	 A-4	 0	0 15		 75-100			0-21	 NTD 4
Pence	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0 0			75-100				
		loam, fine				0 20					0 20	
	i	sandy loam,			İ	i	i	i	İ	i	i	i
	ĺ	loamy sand	ĺ	ĺ	ĺ	ĺ	ĺ	İ	ĺ		İ	ĺ
	8-15	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
		loam, sandy		A-4								
		loam, loam,										
	 	fine sandy loam	 	 	 	 		 	l I			
	15-21	Gravelly coarse	GM. SM.	 A-1-b, A-3	0	0-15	 45-100	40-95	20-70	2-30	0-14	 NP
		sand, loamy	SP-SM, GP-GM	•	i							
	į	sand, sand,	j	j	į	į	į	į	į	i	İ	į
		loamy fine										
		sand										
	21-60	Stratified sand	•	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP	 								
	 	gravelly coarse sand	 	 	l I	 	 	 	l I			1
		Journe Band	! 	! 	I I	! 		1	I I		1	1

Map symbol	 Depth	USDA texture	Classif	ication	Frag	ments		rcentag	_	ng	 Liquid	 Plas-
and	į	İ			>10	3-10	i				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In		!	ļ	Pct	Pct	!	ļ	!		Pct	!
215D:	 		 	 	 			 		 	 	
Pence	0-3	Sandy loam	SM	 A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	 ND-4
1000	3-8		1	A-2-4, A-4	0	1		75-100			0-25	1
	ĺ	loam, fine		į	i			i				i
	j	sandy loam,	İ	İ	İ	į	į	į	į	į	į	į
		loamy sand										
	8-15	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
		loam, sandy		A-4	!		!	!	!			!
		loam, loam,										
	 	fine sandy loam	l I	l I	 			 				
	 15-21	Gravelly coarse	SP-SM SM	 A-1-b, A-3	 0	 0-15	 45-100	 40-95	 20-70	2-30	0-14	 NP
	13 21	sand, loamy	GM, GP-GM		•	0 13	13 100	10)3	1	2 30	0 11	112
	İ	sand, sand,		İ	i	İ	i	i	i	i	i	i
	j	loamy fine	İ	İ	İ	į	į	İ	į	į	į	į
		sand										
	21-60	Stratified sand		A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
		to very	SP, SP-SM		!		!	!	!			!
		gravelly										
	 	coarse sand	l I	l I	 			 				
315A:	 			 	 			 		 		i i
Rib	0-7	Silt loam	CL-ML, CL	A-4, A-6	0	0-7	95-100	90-100	90-100	85-100	20-30	4-11
	7-10	Silt loam	CL-ML	A-4	0	0-7	95-100	90-100	90-100	85-100	20-25	4-7
	10-32	Silt loam,	CL	A-6	0	0-7	95-100	90-100	90-100	85-100	30-40	10-20
		silty clay			!		!	!	!	!		!
		loam									1 7 40	
	32-35	Loam, gravelly loam, sandy	SC, SM, CL,	A-1, A-2, A-4, A-6	0	0-7	55-100	45-100	35-90	20-75	17-40	1-20
	 	loam	1	A-1, A-0	 	 		 		 	 	
	35-37	Gravelly loamy	SP-SM, GM,	A-1-b, A-3	0	0-7	30-100	25-100	25-75	5-30	0-14	NP
		sand, loamy	SM, GP-GM		i			i			i	i
	j	sand, loamy	İ	İ	İ	į	į	İ	į	į	į	į
		coarse sand,										
		very gravelly										
		loamy coarse					!		!			!
		sand										
	37-60	Stratified sand	•	A-1, A-2, A-3	l O	0-7	45-100	40-95	15-65	0-15	0-14	NP
	l I	to very gravelly	SP, GP	I I	I I	 	1	I I	1	1	 	1
	İ	coarse sand		I I	i I			i I			! 	<u> </u>
	ĺ			Ì	İ		i	İ	i	i	i	i

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		_	e passi: umber	ng	 Liquid	 Plas-
and	j	İ		1	>10	3-10	İ				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct			[Pct	
337A:	 		 	 			 	 	 	 		
Plover	0-10	Fine sandy loam	SM, ML	A-4	0	0	95-100	90-100	65-90	35-50	0-20	NP-4
	10-13 	Fine sandy loam, sandy loam, silt loam	SC-SM, SM, ML, CL-ML 	A-4 	0	0 	95-100 	90-100 	70-100 	40-80 	0-20 	NP - 5
	 13-18 	1	 CL-ML, ML, SC-SM, SM 	 A-4 	 0 	 0 	 95-100 	 90-100 	 70-100 	 40-80 	0-20 	 NP-5
	 18-32 	1	SM, CL-ML, ML, SC-SM	A-4 	0	 0 	 95-100 	 90-100 	 65-95 	 40-75 	0-25	NP-7
	32-60	Stratified fine sand to silt	CL-ML, SC-SM,	A-4 	0	0	95-100 	90-100	 60-95 	35-75 	0-25	NP - 7
368B:				İ	İ							
Mahtomedi			SM, SC-SM	A-2	0	0-3			40-75		,	NP-10
	5-8 	Sand, coarse sand, loamy coarse sand	SP-SM, SM 	A-2, A-3 	0	0-3 	85-100 	75-100 	35-75 	5-30 	0-23	NP - 6
	8-15 	Gravelly coarse sand, coarse sand, gravelly sand, sand	j	A-1 	0 	0-15 	60-95 	 50-90 	25-65 	2-15 	0-23	NP - 6
	15-30 	Gravelly sand, coarse sand, sand	SP-SM, SM	 A-1, A-2, A-3 	0	0-15 	60-95 	50-90 	25-65 	2-15 	0-23	NP - 6
	30-60	Gravelly sand, coarse sand	SP-SM, SM 	A-3, A-1, A-2 	0	0-15	55-95 	50-90	25-65	0-15	0-23	NP - 6

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments		rcentag	_	-	!	!
Map symbol and	Depth	USDA texture		1		3-10		sieve n	umber		Liquid	
and soil name			 Unified	AASHTO		3-10 inches	4	10	40	200	limit	ticity index
	l In	1			Pct	Pct	 	<u> </u>	1	1	Pct	
			i		İ		İ	İ	i	i		İ
368B:			İ	j	ĺ	ĺ	İ	ĺ	ĺ	İ	İ	ĺ
Cress	0-3	1	SM, SC	A-2-4, A-4	0	0-5				25-45		
	3-15		SM, SC	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
		fine sandy	1					 				
	 15-31		SP-SM, SM	 A-3	 0	0-5	 55-100	 50-95	 20-75	0-30	0-21	 ND-4
		coarse sand,									0 22	
	İ	gravelly sand,	İ	j	į	į	į	j	į	j	į	İ
		very gravelly										
		loamy sand										
	31-36	Gravelly loamy sand, coarse	SM, SP-SM	A-3	0	0-5	55-100	50-100	20-75	0-30	0-21	NP-4
		sand, coarse sand, gravelly			 		 	 	 			
		sand, very	i		i	i	i		i	i	i	i
	İ	gravelly loamy	İ	j	į	į	į	j	į	j	į	İ
		sand	[
	36-60	Stratified sand		A-1, A-2, A-3	0	0-5	30-100	25-95	15-65	0-15	0-14	NP
		to very	SP, GP-GM									
	l I	gravelly coarse sand	 	1	l I		 	 	 			l I
		coarse sand			l I			 				
368C:	i	İ	į	j	į	j	į	İ	į	j	į	i
Mahtomedi			SC-SM, SM	A-2	0	0-3				20-30		NP-10
	5-8		SM, SP-SM	A-2, A-3	0	0-3	85-100	75-100	35-75	5-30	0-23	NP-6
		sand, loamy coarse sand	1					 				
	 8-15	Gravelly coarse	SM SP-SM	 A-1	 0	 0-15	 60-95	 50-90	 25-65	2-15	0-23	 NP-6
	0 20	sand, coarse				0 20					0 20	
	İ	sand, gravelly	İ	j	į	į	į	j	į	j	į	İ
		sand, sand	[
	15-30	Gravelly sand,	SP-SM, SM	A-1, A-2, A-3	0	0-15	60-95	50-90	25-65	2-15	0-23	NP-6
		coarse sand,										
	 30-60	sand Gravelly sand,	SP-SM SM	 A-3, A-1, A-2	 0	 0-15	 55-95	 50-90	 25-65	0-15	0-23	 NP-6
	30-00	coarse sand	Dr Jon, on	A-3, A-1, A-2		0-13			23-03	0-15	0-23	MF - 0
			i		İ	i	i	İ	i	i	i	i

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments	Pe:	rcentag	e passi	ng		
Map symbol	Depth	USDA texture			ļ			sieve n	umber		Liquid	
and			!	!	>10	3-10	ļ				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
368C:	 		 		l İ	 	 	l İ	 	l I		
Cress	0-3	Sandy loam	SC, SM	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
	3-15	Sandy loam,	SC, SM	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
		fine sandy								Ì		
	 15_31		SP-SM, SM	 A-3	 0	 0-5	 55_100	 50-95	 20-75	0-30	0-21	 NTD _ 4
	15-51 	coarse sand,	Br -BH, BH		0	U-3 	33-100 	30-33	20-75	0-30	0-21	142 - 1
	! 	gravelly sand,	İ	i		! 				i		
	İ	very gravelly	İ	İ	i	İ	İ	i	i	i	İ	İ
	İ	loamy sand	İ	İ	į	į	į	į	į	İ	į	į
	31-36	Gravelly loamy	SM, SP-SM	A-3	0	0-5	55-100	50-100	20-75	0-30	0-21	NP-4
		sand, coarse										
		sand, gravelly										
		sand, very										
		gravelly loamy										
	26 60	sand Stratified sand	 GD GD GM	 A-1, A-2, A-3	 0	 0-5		 25-95	 16 66	0-15	0-14	 NP
	30-00 	to very	SP-SM, SP	A-1, A-2, A-3	0	U-5 	30-100	23-95 	122-02	0-15	0-14	NP
	 	gravelly	51 511, 51	l I	 	 	 	 	 			
		coarse sand		İ	į	<u> </u>	į	į	į	ļ		į
368D:	 				 	 	 	 	 			
Mahtomedi	0-5	Loamy sand	SM, SC-SM	A-2	0	0-3	85-100	75-100	40-75	20-30	0-28	NP-10
	5-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	75-100	35-75	5-30	0-23	NP-6
		sand, loamy										
		coarse sand										
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	50-90	25-65	2-15	0-23	NP-6
	 	sand, coarse sand, gravelly				 						
	 	sand, gravelly sand, sand	 	I I	l I	 	 	l I	l I		 	
	 15-30		SM SP-SM	 A-1, A-2, A-3	 0	 0-15	 60-95	 50-90	 25-65	2-15	0-23	 NP-6
	13 30	coarse sand,		1 2, 11 2, 11 3		0 13		30 30	23 03	2 13	0 23	
	İ	sand	İ	į	i	İ	į	i	į	i	İ	į
	30-60	Gravelly sand,	SM, SP-SM	A-3, A-1, A-2	0	0-15	55-95	50-90	25-65	0-15	0-23	NP-6
		coarse sand										

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Frag	ments		rcentage sieve n	_	-	Liquid	
and soil name	 	1	Unified	AASHTO		3-10 inches	4	10	40	200	limit	ticity index
	In	İ			Pct	Pct					Pct	
368D:	 	 	 	 			 	l I	 			
Cress	0-3	Sandy loam	SM, SC	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
	3-15 	Sandy loam, fine sandy loam	SC, SM 	A-2-4, A-4 	0 	0-5 	85-100 	80-100 	55-80 	25-45	0-28	NP - 9
	15-31 	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM	A-3 	0 	0-5 	55-100 	50-95 	20-75 	0-30	0-21	NP - 4
	31-36	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3 	0 	0-5	55-100 	50-100 	20-75 	0-30	0-21	NP - 4
	36-60	Stratified sand to very gravelly coarse sand	GP, SP-SM, GP-GM, SP 	 A-1, A-2, A-3 	0 	0-5	30-100 	 25-95 	 15-65 	0-15	0-14	NP
371A:					 	 		 	 			
Croswell	0-1	Loamy sand	SM	A-1-b, A-2-4	0	0	80-100	75-100	30-75	10-35	0-14	NP
	1-7 	Loamy sand,	SC-SM, SM,	A-1-b, A-2 	0 	0 	90-100 	75-100 	40-75 	3-30	0-25	NP - 7
	7-16 	Loamy sand,	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0 	0 	90-100 	75-100 	40-75 	3-30	0-14	NP
	16-39 	Sand, loamy sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	0 	0 	90-100 	75-100 	40-75 	3-30	0-14	NP
	39-60 	Sand 	SM, SP, SP-SM	A-1-b, A-2-4,	0 	0 	90-100	75-100 	40-70 	3-15	0-14	NP

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	fication	Fragi	nents		rcentag	_	-	 Liquid	 Plas-
and	Ī	İ		1	>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200	ĺ	index
	In		 		Pct	Pct		[1	Pct	
380B:												
Cress	0-3		SM, SC	A-2-4, A-4	0					25-45	1	
	3-15 	Sandy loam, fine sandy loam	SC, SM 	A-2-4, A-4 	0 	0-5 	85-100 	80-100 	55-80 	25-45	0-28	NP - 9
	15-31 	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM 	A-3 	0 	0-5	55-100 	50-95 	20-75	0-30	0-21	NP - 4
	31-36	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3	0 	0-5	55-100 	50-100 	20-75	0-30	0-21 	NP - 4
	36-60	Stratified sand to very gravelly coarse sand	SP-SM, SP, GP-GM, GP 	A-1, A-2, A-3	0 	0-5 	 30-100 	 25-95 	 15-65 	0-15 	0-14 	NP
Rosholt	0-8	Sandy loam	SM	A-2, A-4	0	0-3	80-100	75-100	50-75	25-40	0-21	NP-4
	8-10 	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1, A-2, A-4	0 	0-3		50-100 			0-23	NP - 6
	10-14	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1, A-2, A-4	0 	0-3	55-100 	50-100 	35-75 	15-40	0-23	NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	sm, sc 	A-1, A-2, A-4	0 	0-3	55-100 	50-100 	35-80	20-45	0-26	NP - 8
	28-34	Gravelly loamy sand, very gravelly coarse sand, sand	SP-SM, SM, GM, GP-GM 	A-1, A-2, A-3	0 	0-25 	30-100 	 25-100 	20-80	5-25 	0-23	NP - 6
	34-60 	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM 	A-1, A-2, A-3 	0 	0-25 	30-100 	25-100 	15-65 	0-15 	0-14 	NP

			Classif	ication		Fragn	nents	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture			_			:	sieve n	umber		Liquid	Plas-
and				ļ		10	3-10	ļ				limit	
soil name		<u> </u>	Unified	AASHTO	in	ches	inches	4	10	40	200		index
	In			[P	ct	Pct					Pct	
				ļ							!		!
380C:													
Cress				A-2-4, A-4		0		85-100				0-28	
	3-15	Sandy loam, fine sandy	SC, SM	A-2-4, A-4		0	0-5	85-100	80-100 	55-80 	25-45	0-28	NP - 9
		loam	! 	i					! 	! 			i
	15-31	1	SM, SP-SM	A-3	i	0	0-5	55-100	50-95	20-75	0-30	0-21	NP-4
		coarse sand,	İ	Ì	į			į	į	j	į	İ	İ
		gravelly sand,	İ	Ì	į			į	j	į	İ	İ	İ
		very gravelly		Ì	ĺ	ĺ		ĺ	ĺ	ĺ	İ	İ	İ
		loamy sand											
	31-36	Gravelly loamy	SP-SM, SM	A-3		0	0-5	55-100	50-100	20-75	0-30	0-21	NP-4
		sand, coarse											
		sand, gravelly											
		sand, very											
		gravelly loamy											
		sand											
	36-60	Stratified sand	!	A-1, A-2,	A-3	0	0-5	30-100	25-95	15-65	0-15	0-14	NP
		to very	SP, SP-SM		!					ļ			
		gravelly											
		coarse sand	 	l I					 	 			
Rosholt	0 - 8	Sandy loam	 SM	A-2, A-4		0	 0-3	 80-100	 75_100	 50-75	25-40	0-21	ND_4
KOBIIOI C			1	A-1, A-2,		0		55-100				0-21	1
	0 10	fine sandy	511, 50 511	1, 1, 1, 2,			0 3	33 100	50 100	33 73	13 10	0 23	1112
		loam, gravelly	! 	ì				 	! 	! 	i		i
		loamy sand		i	i			İ	İ	İ	i	İ	i
	10-14	:	SC-SM, SM	A-1, A-2,	A-4	0	0-3	55-100	50-100	35-75	15-40	0-23	NP-6
		fine sandy	İ	i	i			İ	İ	İ	i	İ	i
		loam, gravelly	İ	į	i			į	į	j	i	İ	i
		loamy sand	İ	Ì	į	į		j	j	j	į	j	į
	14-28	Sandy loam,	SM, SC	A-1, A-2,	A-4	0	0-3	55-100	50-100	35-80	20-45	0-26	NP-8
		fine sandy											
		loam, gravelly											
		loam											
	28-34	Gravelly loamy	GP-GM, SM,	A-1, A-2,	A-3	0	0-25	30-100	25-100	20-80	5-25	0-23	NP-6
		sand, very	SP-SM, GM										
		gravelly											
		coarse sand,		ļ				ļ	ļ		ļ		!
		sand											!
	34-60	Stratified sand	•	A-1, A-2,	A-3	0	0-25	30-100	25-100	15-65	0-15	0-14	NP
		to very	SP-SM, GP-GM										
		gravelly		Į.					Į.		1		
		coarse sand	<u> </u>	!	ļ			ļ	!	!	ļ		!

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	fication	Frag	ments		rcentago sieve n	_	_	 Liquid	 Plas-
and				1	>10	3-10	i				limit	
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct				İ	Pct	
380D:							 	 				
Cress	0-3	Sandy loam	SC, SM	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
	3-15 	Sandy loam, fine sandy loam	SM, SC 	A-2-4, A-4 	0 	0-5 	85-100 	80-100 	55-80 	25-45 	0-28	NP - 9
	15-31 	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM 	A-3 	0 	0-5 	55-100 	50-95 	20-75 	0-30	0-21	NP - 4
	31-36	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3	0 	0-5 	 55-100 	 50-100 	 20-75 	0-30	0-21	 NP - 4
	36-60	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM 	A-1, A-2, A-3	0 	0-5 	30-100 	25-95 	 15-65 	0-15	0-14	NP
Rosholt	0-8	Sandy loam	SM	A-2, A-4	0	0-3	80-100	75-100	50-75	25-40	0-21	NP-4
	8-10 	Sandy loam, fine sandy loam, gravelly loamy sand	SC-SM, SM	A-1, A-2, A-4	0 	0-3	55-100 	50-100 	35-75 	15-40	0-23	NP - 6
	10-14 		 SC-SM, SM 	A-1, A-2, A-4	0 	0-3	 55-100 	 50-100 	 35-75 	15-40	0-23	 NP - 6
	14-28	Sandy loam, fine sandy loam, gravelly loam	SC, SM 	A-1, A-2, A-4	0 	0-3	55-100 	50-100 	35-80 	20-45	0-26	NP - 8
	28-34 	Gravelly loamy sand, very gravelly coarse sand, sand	SM, GP-GM, GM, SP-SM	A-1, A-2, A-3	0 	0-25 	30-100	25-100 	20-80 	5-25 	0-23	NP - 6
	34-60	Stratified sand to very gravelly coarse sand	SP-SM, SP, GP-GM, GP 	A-1, A-2, A-3	0 	0-25	30-100 	25-100 	15-65 	0-15	0-14	NP

Map symbol	Denth	USDA texture	Classi	fication	Fragn	nents		rcentago sieve n	_	-	 Liquid	Dlag
and	Depth	USDA CEXCUIE	l	1	>10	3-10	'	sieve II	miner		limit	
soil name		I I	Unified	AASHTO	inches		 4	10	40	200		index
5011 1141110	In	1			Pct	Pct	<u> </u>	 	<u></u>	1	Pct	
		j		İ	j i		İ	j	İ	i	į	į
883B:		İ	ĺ	j	į į		ĺ	ĺ	ĺ	İ	İ	ĺ
Mahtomedi	0 - 5	Loamy sand	SC-SM, SM	A-2	0	0-3	85-100	75-100	40-75	20-30	0-28	NP-10
	5-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	75-100	35-75	5-30	0-23	NP-6
		sand, loamy										
		coarse sand										
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	50-90	25-65	2-15	0-23	NP-6
		sand, coarse										
		sand, gravelly sand, sand	 				 	 				
	15_30	Gravelly sand,	 cw: cp_cw :	 A-1, A-2, A-3		0-15	 60-95	 50-90	 25-65	2-15	0-23	 ND_6
	13-30	coarse sand,	SM, SF-SM 	A-1, A-2, A-3	0	0-13	00-33	30-30	23-03	2-13	0-23	MF - 0
		sand	 		 		 	l I	 	1		l I
	30-60	Gravelly sand,	SM, SP-SM	A-3, A-1, A-2	0	0-15	55-95	50-90	25-65	0-15	0-23	NP-6
		coarse sand	İ	i	i i		İ	İ	İ	i	İ	İ
		İ	İ	i	j i		į	į	į	İ	į	į
383C:		į	İ	İ	į į		ĺ	ĺ	ĺ	İ	İ	ĺ
Mahtomedi	0 - 5	Loamy sand	SM, SC-SM	A-2	0	0-3	85-100	75-100	40-75	20-30	0-28	NP-10
	5-8	Sand, coarse	SP-SM, SM	A-2, A-3	0	0-3	85-100	75-100	35-75	5-30	0-23	NP-6
		sand, loamy										
		coarse sand							!			!
	8-15	Gravelly coarse	SP-SM, SM	A-1	0	0-15	60-95	50-90	25-65	2-15	0-23	NP-6
		sand, coarse	 					 				
		sand, gravelly sand, sand	l I		 		 	l I	 			
	15-30	Gravelly sand,	∣ ISM SP-SM	A-1, A-2, A-3	 0	0-15	 60-95	 50-90	 25-65	2-15	0-23	 NP-6
	13-30	coarse sand,	BM, BF-BM	A-1, A-2, A-3	0 	0-13	00-55 	30-30 	23-05	2-15	0-23	142 - 0
		sand	! 		! 		 	! 		i		İ
	30-60	Gravelly sand,	SM, SP-SM	A-3, A-1, A-2	0	0-15	55-95	50-90	25-65	0-15	0-23	NP-6
		coarse sand	İ	i	i i		İ	İ	İ	i	i	İ
		İ	İ	j	j i		j	j	į	İ	į	į
83D:												
Mahtomedi	0-5	Loamy sand	SC-SM, SM	A-2	0	0-3	85-100	75-100	40-75	20-30	0-28	NP-10
	5-8		SP-SM, SM	A-2, A-3	0	0-3	85-100	75-100	35-75	5-30	0-23	NP-6
		sand, loamy										
		coarse sand										
	8-15	Gravelly coarse	SM, SP-SM	A-1	0	0-15	60-95	50-90	25-65	2-15	0-23	NP - 6
		sand, coarse										
		sand, gravelly sand, sand	 		 		 	 	 			
	15-30	sand, sand Gravelly sand,	SM SP-SM	 A-1, A-2, A-3		0-15	 60-95	 50-90	 25-65	2-15	0-23	 NP-6
	13-30	coarse sand,	DM, DF-DM	A-1, A-2, A-3	0	0-13		50-50	23-05	2-15	0-23	
		sand	! 		ı 		İ	! 	İ	ì		İ
	30-60	Gravelly sand,	SP-SM, SM	A-3, A-1, A-2	0	0-15	 55-95	50-90	25-65	0-15	0-23	NP-6
		coarse sand		' ' ' '	İ		i	İ		-	i .	İ

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture	l		_			sieve n	umber		Liquid	
and					>10	3-10					limit	ticity
soil name		<u> </u>	Unified	AASHTO		inches	4	10	40	200		index
	In				Pct	Pct					Pct	
396B:			1				 					
Friendship	0-4	Sand	 SM	}	0	 0	 95_100	90-100	 60-75	5-15	0-23	 NP-3
riiendship		Sand	SM	A-2, A-3	0	0		90-100	1	5-15		NP-4
	29-60	Sand	SM	A-2, A-3	0	0		90-100	1	5-15		NP-1
					i		ĺ		i			İ
Wurtsmith	0-6	Sand	SM	A-2, A-3	0	0	85-100	75-100	50-70	5-15	0-14	NP
	6-33	Sand	SM	A-2, A-3	0	0	85-100	75-100	50-70	5-15	0-14	NP
	33-60	Sand	SM	A-2, A-3	0	0	85-100	75-100	50-70	5-15	0-14	NP
Grayling		Sand	SM	A-2, A-3	0	0		90-100		5-15	0-14	NP
		Sand	SM	A-2, A-3	0	0		90-100	1	5-15	0-14	NP
		Sand	SM	A-2, A-3	0	0		90-100	1	5-15	0-14	NP
	23-60	Sand	SM	A-3, A-2	0	0	95-100	90-100	60-75	5-15	0-14	NP
397A: Perchlake	0-9		 GM	 A-2-4	0	 0		 85-100	 75 OF	120.20	0-17	 NP-5
Perchiake		Loamy fine sand	SM, SP-SM	A-2-4	0	0		85-100				NP-5 NP-5
	3-10	sand, loamy	SM, SF-SM	A-2-4 	0	0	30-100 	63-100	/ 3 - 3 3	10-13	0-17	MF - 3
		fine sand,	 	i		! 	 	i	i	i		i İ
		loamy sand		ì		<u> </u>	İ	i	i	i		i
	18-42	Sand, loamy	SP-SM, SM	A-2-4	0	0	90-100	85-100	40-55	10-20	0-17	NP-5
		sand, loamy	İ	i	j	į	į	i	i	i	į	į
		fine sand,		İ	İ	İ	ĺ	İ	İ	İ	İ	ĺ
		fine sand										
	42-46	Fine sandy	SC-SM, SM	A-4	0	0	90-100	85-100	70-90	35-45	0-26	NP-7
		loam, sandy										
		loam, loam		ļ					!			
	46-60	Sand, fine sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-70	5-15	0-17	NP-5
399B:	0.0										0-14	
Grayling	0-3 3-15	Sand Sand	SM	A-2, A-3 A-2, A-3	0	0 0		90-100 90-100	1	5-15	0-14	NP NP
	15-23	Sand	SM	A-2, A-3	0	0		90-100		5-15	0-14	NP
		Sand	SM	A-3, A-2	0	0		90-100		5-15	0-14	NP
	23 00			11 37 11 2			33 100		00 / 5	3 13	0 11	111
399C:				ì	i	i	İ	i	i	i	İ	İ
Grayling	0-3	Sand	SM	A-2, A-3	0	0	95-100	90-100	60-75	5-15	0-14	NP
	3-15	Sand	SM	A-2, A-3	0	0	95-100	90-100	60-75	5-15	0-14	NP
	15-23	Sand	SM	A-2, A-3	0	0	95-100	90-100	60-75	5-15	0-14	NP
	23-60	Sand	SM	A-3, A-2	0	0	95-100	90-100	60-75	5-15	0-14	NP
				Ţ		[[
399D:			!	Ţ								
Grayling	0 - 3	Sand	SM	A-2, A-3	0	0		90-100	1	5-15	0-14	NP
		Sand	SM	A-2, A-3	0			90-100		5-15	0-14	NP
	15-23	Sand	SM	A-2, A-3	0	0		90-100		5-15	0-14	NP
	23-60	Sand	SM	A-3, A-2	0	0	 32-T00	90-100	00-75	5-15	0-14	NP
		1		1			I	1	I	1	1	I

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif:	ication	Fragi	ments		rcentag sieve n	e passi: umber	ng	 Liquid	 Plas-
and	202011			l	>10	3-10	i '	II			limit	
soil name			 Unified	AASHTO		inches	4	10	40	200	.,	index
	In				Pct	Pct					Pct	
405A:	 		 			 	 	 	 	 		
Lupton	0-65	Muck	PT	A-8	0	0	100	100	ļ			
Cathro	 0-28	Muck	 PT	 A-8	0	 0	100	100	 	 		
	28-49 	Loam, silty clay loam, sandy loam	CL-ML, SC, CL, SC-SM 	A-4, A-6 	0 	0-5 	80-100 	65-100 	60-100 	35-90 	20-40	4-20
	49-60 	Sandy loam, silty clay loam, loam	SC, CL, CL-ML, SC-SM	A-4, A-6 	0 	0-5	80-100 	65-100 	60-100 	35-90	20-40	4-20
Tawas	 0-31	Muck	 PT	 A-8	0	 0	100	100	 	 		
	31-60	Fine sand, loamy fine sand, coarse sand, gravelly sand, loamy sand, sand	SC-SM, SM, SP-SM 	A - 2 - 4 	0	0 	100 	70-100 	65-90 	10-30	0-23	NP - 6
406A:			 					[
Loxley	0-13	Mucky peat Muck	PT PT	A-8 A-8	0 0	0 0	100 100	100 100	100 100	100 100		NP NP
407A:	 		 	 	 	 	 	l I	 	 		
Seelyeville	0-80	Muck	PT	A-8	0	0	100	100	100	100		NP
Markey	0-32	Muck	 PT	 A-8	0	0	100	100		 		
	32-60 	Sand, fine sand, loamy sand, gravelly sand	SM, SP-SM 	A-1, A-2, A-3 	0 	0 	70-100 	50-100 	30-65 	5-15 	0-23	NP - 6
410A:	 		 	 						 		
Seelyeville	0-80	Muck	PT	A-8	0	0	100	100	100	100	0-0	NP
Cathro		Muck	 PT	 A-8	0	0	100	100		 		
	28-49 	Loam, silty clay loam, sandy loam	CL-ML, CL, SC, SC-SM 	A-4, A-6 	0 	0-5 	80-100 	65-100 	60-100 	35-90 	20-40	6-21
	49-60 	Sandy loam, silty clay loam, loam	SC, SC-SM, CL-ML, CL	A-4, A-6 	0	0-5	80-100 	65-100 	60-100 	35-90 	20-40	6-21

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	ficatio	n	Fragi	ments		rcentage	_	_	 Liquid	 Plas-
and				T		>10	3-10						ticity
soil name			Unified	AA	SHTO		inches	4	10	40	200		index
	In	į.		į		Pct	Pct	<u> </u>				Pct	<u> </u>
412A:			 				 	 		 			
Rifle	0 - 4	Peat	PT	A-8		0	0	100	100				
	4-60	Mucky peat	PT	A-8		0	0	100	100				
Tacoosh	0-8	Muck	 PT	A-8		0	0	100	100	 			
	8-40	Mucky peat	PT	A-8		0-5	0	100	100				
	40-42 	Very fine sandy loam, sandy loam, loam	SM, SC-SM 	A - 4 		0 	0 	85-100 	75-100 	45-95 	25-75 	0-25 	NP - 7
	42-60 	Sandy loam, very fine sandy loam, loam	SC-SM, SM 	A-4 		0 	0 	85-100 	75-100 	45-95 	25-75 	0-25 	NP - 7
415A:				İ		i		İ			İ		İ
Greenwood	0-60	Mucky peat	PT	A-8		0	0	100	100				
439B:			 				 	 		 			
Graycalm	0-3	Loamy sand	SM	A-2		0	0-5	95-100	80-100	40-75	15-30	0-26	NP-6
	3-22 	Sand, loamy	SM, SP-SM	A-2		0	0-5 	95-100 	80-100 	40-75 	5-30	0-23	NP - 6
	22-35	Sand, loamy	SM 	A-2,	A-3	0	0-5 	95-100 	80-100 	40-75 	5-30	0-23	NP - 6
	35-60 	Stratified sand to loamy sand	SM 	A-2,	A-3	0	0-5 	95-100 	80-100 	40-80 	5-30	0-27	NP-10
Menahga	0-1 	Slightly decomposed plant material	 PT 	A-8		0	 0 	 100 	 100 	 		 	
	1-2	Loamy sand	SM	A-2		0	0	95-100	80-100	40-75	15-30	0-26	NP-6
	2-25	Sand, loamy sand	SM	A-2,	A-3	0	0	95-100	85-100	55-75 	5-20	0-14	NP
	25-80	Sand, coarse sand	sm 	A-2,	A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
439C:			 				 	 	 	 			
Graycalm	0-3	Loamy sand	SM	A-2		0	0-5	95-100	80-100	40-75	15-30	0-26	NP-6
-	3-22	Sand, loamy	SP-SM, SM	A-2		0	0-5	95-100	80-100	40-75	5-30	0-23	NP - 6
	22-35	Sand, loamy	sm 	A-2,	A-3	0	0-5	95-100	80-100	40-75	5-30	0-23	NP-6
	35-60	Stratified sand to loamy sand	 sm 	A-2,	A-3	0	 0-5 	 95-100 	80-100 	40-80	5-30	0-27	 NP-10

			Classif	icati	on		Frag	ments	Pe:	rcentag	e passi	ng		
Map symbol	Depth	USDA texture								sieve n	umber		Liquid	Plas-
and							>10	3-10					limit	ticity
soil name			Unified	A	ASHTO		inches	inches	4	10	40	200		index
	In						Pct	Pct					Pct	
		!	!	!						!		!		
439C:				!						!	!	!		ļ
Menahga	0-1	Slightly	PT	A-8			0	0	100	100				
		decomposed		!						!	!	!		ļ
		plant material		!						!	!	!		ļ
	1-2	Loamy sand	SM	A-2			0	0			40-75		0-26	1
	2-25	Sand, loamy	SM	A-2,	A-3		0	0	95-100	85-100	55-75	5-20	0-14	NP
		sand												
	25-80	Sand, coarse	SM	A-2,	A-3		0	0	95-100	85-100	55-70	5-15	0-14	NP
		sand												
439D:														
Graycalm		Loamy sand	SM	A-2			0	0-5			40-75		1	NP-6
	3-22	Sand, loamy	SP-SM, SM	A-2			0	0-5	95-100	80-100	40-75	5-30	0-23	NP-6
		sand												
	22-35	Sand, loamy	SM	A-2,	A-3		0	0-5	95-100	80-100	40-75	5-30	0-23	NP-6
		sand												
	35-60	Stratified sand	SM	A-2,	A-3		0	0-5	95-100	80-100	40-80	5-30	0-27	NP-10
		to loamy sand												
Menahga	0-1	Slightly	PT	A-8			0	0	100	100				
		decomposed												
		plant material	'											
	1-2	Loamy sand	SM	A-2			0	0			40-75		1	NP-6
	2-25	Sand, loamy	SM	A-2,	A-3		0	0	95-100	85-100	55-75	5-20	0-14	NP
		sand												
	25-80	Sand, coarse	SM	A-2,	A-3		0	0	95-100	85-100	55-70	5-15	0-14	NP
		sand												
				!						!	!	!		ļ
441C:				!						!	!	!		ļ
Freeon		Silt loam	ML, CL-ML, CL				0-2				80-100			1
	4-19	Silt loam	CL, CL-ML, ML	1			0-2	0-5			80-100		1	NP-10
	19-39	Sandy loam,		A-1,	A-2,	A-4	0-5	0-7	60-100	50-90	30-90	15-70	0-30	NP-10
		gravelly loam	CL	!						!	!	!		ļ
	39-53	Sandy loam,	SC-SM, ML,	A-1,	A-2,	A-4	0-5	0-7	60-100	50-90	30-90	15-70	0-25	NP-7
		gravelly loam,	CL-ML, SM											
		fine sandy		!						!	!	!		ļ
		loam		!						!	!	!		ļ
	53-80	Sandy loam,	SM, SC-SM	A-1,	A-2		0-5	0-7	60-100	50-90	30-90	15-35	0-25	NP-7
		gravelly fine	!	!				!		!	!	!		
		sandy loam	!	!				!		!	!	!		

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		rcentag	e passi:	ng	 Liquid	 Plas-
and				Ī	>10	3-10	ĺ					ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	İ			Pct	Pct			<u> </u>	<u> </u>	Pct	<u> </u>
441C:			 	 						 		
Cathro	0-28	Muck	PT	A-8	0	0	100	100				
	28-49	Loam, silty clay loam, sandy loam	CL-ML, SC, CL, SC-SM 	A-4, A-6 	0 	0-5 	80-100 	65-100 	60-100 	35-90 	20-40	4-20
	49-60	Sandy loam, silty clay loam, loam	CL, CL-ML, SC, SC-SM 	A-4, A-6 	0 	0-5 	 80-100 	65-100 	60-100 	35-90 	20-40	4-20
442C:				İ		İ	İ	İ	İ	İ	İ	İ
Haugen	0 - 4	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	4-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam	SM, SC-SM	A-1, A-2, A-4	0-5	0-7	55-100 	50-90	35-85	15-65 	16-28 	1-9
	15-23	Gravelly sandy loam, sandy loam, fine sandy loam, gravelly loam	SC-SM, SM	A-1, A-2, A-4 	0-5	0-7 	55-100 	50-90 	35-75 	15-45 	16-28 	1-9
	23-35	Gravelly sandy loam, sandy loam, gravelly fine sandy loam	j	A-1, A-2, A-4 	0-5 	0-7 	55-100 	50-90 	35-75 	15-45 	16-27 	2-10
	35-49	Sandy loam, gravelly sandy loam, fine sandy loam	SC, SM 	A-2, A-4, A-1 	0-5	0-7 	55-100 	50-90 	35-75 	15-45 	 17-28 	3-10
	49-79	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM	A-1, A-2 	0-5	0-7 	55-100 	50-90 	35-75 	15-45 	18-30	4-12
	79-80	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM, SM 	A-1, A-2, A-4 	0-5 	0-7 	55-100 	50-90 	 35-75 	15-45 	 17-27 	3-10
Greenwood	0 - 6	Peat	PT	A-8	0	0	100	100	100	100		NP
	6-60	Mucky peat	 PT 	A-8	0	0 	100	100	100	100		NP

Map symbol	Depth	USDA texture	Classif	fication	Fragi	ments		_	e passi umber	-	 Liquid	 Plas-
and					>10	3-10	i '					ticity
soil name	İ	İ	Unified	AASHTO	inches	inches	4	10	40	200	İ	index
	In		ļ	ļ	Pct	Pct	[[Pct	
443D:	 		 		1			 				
Amery	0-3	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-75	25-40	17-30	1-7
	3-22 	Sandy loam, loam, gravelly loam, gravelly sandy loam	!	A-2-4, A-4 	0-5	0-7 	55-100 	50-90 	50-75 	25-45	15-27 	1-10
	22-34 	Sandy loam, fine sandy loam, gravelly sandy loam	SC-SM, SM	A-1-b, A-2-4, A-4 	0-5	0-7 	55-100 	50-90 	35-75	15-40	15-26 	1-9
	34-41 		SM, SC-SM 	A-1-b, A-2-4, A-4	0-5	0-7 	55-100 	50-90 	35-75	15-40	15-27 	 1-10
	 41-57 	Gravelly sandy loam, fine sandy loam,	 SC, SM 	A-2-4, A-4,	0-5	 0-7 	 55-100 	 50-90 	35-75	20-45	 17-29 	 3-11
	 57-71 	fine sandy loam, gravelly	 SC, SM 	A-2-4, A-4, A-1-b	0-5	 0-7 	 55-100 	 50-90 	35-75	20-45	 17-29 	 3-11
	 71-80 	sandy loam Sandy loam, fine sandy loam, gravelly sandy loam	 SM, SC-SM 	A-1-b, A-2-4, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 15-27 	 1-10
Greenwood	 0-6	Peat	 PT	A-8	0	0	100	100	100	100		 NP
	6-60	Mucky peat	PT	A-8	0	0	100	100	100	100		NP
461A:	 		 			 	 	 		[]		
Bowstring	•	Muck	PT	A-8	0	0	100	100				
	38-47 	Fine sand, sand, loamy sand	SM, SP-SM 	A-2 	0 	0 	100 	100 	85-95 	10-20 	0-19 	NP
	47-80	Muck	PT	A-8	0	0	100	100				

484A:

Greenwood-----

Beseman-----

0 - 6

Peat

36-60 | Silt loam,

loam

loam, sandy

0-36 Muck

6-60 Mucky peat

PT

PT

PT

CL

A-8

A-8

A-8

|CL-ML, SC-SM, |A-4, A-2-4|

0

0

0

0

0

0

0

100

100

100

100

100

100

100

100

0-2 |80-100|65-100|40-100|25-90 |20-33 | 4-13

100

100

NP

NP

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture			_		:	sieve n	umber		Liquid	
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In		[Pct	Pct		[[Pct	
4055												
495B: Karlsborg	0.0	 T	 SM	 A-2	0	 0	 0F 100	 95-100			 0-14	 NP
karisborg		Loamy sand Sand, loamy	SM	A-2	0	0		95-100			0-14	NP
	9-20	sand, roamy	SM	A-2	0	0	33-100	33-100	70-75	20-25	0-14	NP
	28-48		CH	 A-7	0	0	100	100	 85-100	 85-100	64-90	 40-60
	48-80	Sand	SM	A-2	0	0	100	100	50-70	5-15		NP-2
							====	====		5 25	0 27	
Grettum	0-3	Loamy sand	SC-SM, SM	A-2-4	0	0	90-100	85-100	60-80	15-25	0-23	NP-6
	3-32	Sand, loamy	SC-SM, SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand										
	32-75	Sand, loamy	SC-SM, SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand										
	75-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-21	NP-4
Perida		Loamy sand	SM	A-2 A-2	0	0 0		80-100	1		0-14	NP
	9-43	Sand, loamy	SM	A-2	0	0	90-100	80-100	60 - 75	15-25	0-14	NP
		sand, line		1		 	l I	l I		1	 	l I
	43-45	Loamy sand,	SM	 A-2	0	0	 90 - 100	 80-100	 60-75	 15-25	0-14	 NP
	13 13	sand, fine					30 100		00 / 5	13 23	0 11	112
		sand			i	 	 	<u> </u>	i		 	İ
	45-60	Clay, silty	CH	A-7	0	0	100	100	90-100	75-100	64-90	40-60
		clay	İ	i	j	į	į	į	İ	i	į	į
	60-74	Silty clay,	CH	A-7	0	0	100	100	90-100	75-100	64-90	40-60
		clay										
	74-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-14	NP
					ļ			!	!	!		
495C:												
Karlsborg	0-9	Loamy sand	SM SM	A-2 A-2	0	0 0		95-100			0-14	NP NP
	9-28	Sand, loamy sand	SM	A-2	0	0	 95-T00	 95-100	/ 0 - / 5	20-25	0-14	NP
	28-48	Clay	CH	 A-7	0	0	100	100	 85-100	85-100	 64-90	 40-60
	48-80	Sand	SM	A-2	0	0	100		50-70	5-15		NP-2
	10 00						====	=00		5 25	0 25	
Grettum	0-3	Loamy sand	SM, SC-SM	A-2-4	0	0	90-100	85-100	60-80	15-25	0-23	NP-6
	3-32	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
j		sand		İ	j	İ	ĺ	ĺ	İ	İ	İ	ĺ
İ	32-75	Sand, loamy	SC-SM, SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand										
	75-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-21	NP-4

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Fragi	ments		rcentag	-	ng		[
Map symbol	Depth	USDA texture			_		!	sieve n	umber		Liquid	
and					>10	3-10		1			limit	
soil name		l	Unified	AASHTO		inches	4	10	40	200		index
	In				Pct	Pct					Pct	
495C:				l		 	 	 	l I	l I	 	l I
Perida	0 - 9	Loamy sand	SM	 A-2	0	l l 0	 00_100	80-100	 60 - 75	15-25	0-14	 NP
reliua		Sand, loamy	SM	A-2	0	0 0		80-100			0-14	NP
	7-43	sand, fine	DM	1 - 2		ı	 	00-100 	00-75	13-23	0-14	142
		sand, line				 	l I	 	 	 	l l	i i
	43_45	Loamy sand,	SM	 A-2	0	l l 0	 90_100	80-100	 60-75	 15-25	0-14	 NP
	13-13	sand, fine	DM	1 - 2		ı	 	00-100 	00-75	13-23	0-14	142
		sand				 	l I	 	 	 	l l	i i
	45-60	Clay, silty	CH	 A-7	0	l l 0	1 100	100	 90_100	 75_100	64-90	 40-60
	45-00	clay	-	1		ı	1	100	30 - 1 00	75-100 	104-30	1 40 - 00
	60-74	Silty clay,	CH	 A-7	0	l l 0	1 100	100	 90_100	 75_100	64-90	 40-60
	00 / 1	clay		/		"	1 200	100	30 100	73 100	01 50	1
	74-80		SM	A-2-4, A-3	0	l l 0	 90_100	 85-100	 55-75	 5-15	0-14	 NP
	74-00		BM	R-2-4, R-3		0	JU-100	03-100 	33-73	3-13	0-14	141
495D:					1	! 	! 	 		 		
Karlsborg	0-9	Loamy sand	sm	A-2	i o	0	95-100	95-100	70-75	20-25	0-14	NP
i	9-28	Sand, loamy	SM	A-2	i o	0	95-100	95-100	70-75	20-25	0-14	NP
i		sand	İ	į	i	İ	İ	İ	İ	i	İ	i
j	28-48	Clay	СН	A-7	j o	0	100	100	85-100	85-100	64-90	40-60
İ	48-80	Sand	SM	A-2	0	0	100	100	50-70	5-15	0-19	NP-2
j		İ	İ	j	İ	İ	j	İ	į	İ	İ	İ
Grettum	0-3	Loamy sand	SM, SC-SM	A-2-4	0	0	90-100	85-100	60-80	15-25	0-23	NP-6
	3-32	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand										
	32-75	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand										
	75-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-21	NP-4
										!	ļ	!
Perida		Loamy sand	SM	A-2	0	0		80-100			0-14	NP
	9-43	Sand, loamy	SM	A-2	0	0	90-100	80-100	60-75	15-25	0-14	NP
		sand, fine			ļ							!
		sand										!
	43-45	Loamy sand,	SM	A-2	0	0	90-100	80-100	60-75	15-25	0-14	NP
		sand, fine			ļ							
	45 60	sand										
	45-60	Clay, silty	СН	A-7	0	0	100	100	90-100	75-100	64-90	40-60
	co = :	clay					1 100					
	60-74	Silty clay,	CH	A-7	0	0	100	100	90-100	75-100	64-90	40-60
	E4 00	clay										
	74-80	Sand	SM	A-2-4, A-3	0	0	AO-TOO	85-100	55-75	5-15	0-14	NP

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	Fragi	ments		_	e passi umber	-	 Liquid	 Plas-
and	ĺ	İ			>10	3-10	ĺ				limit	ticity
soil name	j	İ	Unified	AASHTO	inches	inches	4	10	40	200	į	index
	In	1		1	Pct	Pct					Pct	
497A:	 	 			1	 	 	 	 	l I		
Meenon	0-9	Loamy sand	SM	A-2	0	0	80-100	75-100	45-75	20-30	0-14	NP
	9-28	Sand, loamy	SM	A-3	0	0	80-100	75-100	35-75	5-30	0-14	NP
		fine sand										
	28-41	Clay	CH	A-7	0	0	97-100	95-100	80-100	75-100	65-85	40-60
	41-80	Sand, fine	SM	A-3	0	0	97-100	95-100	60-70	5-25	0-20	NP-4
		sand, loamy										
		fine sand										
515A:	 	İ	 				 	! 				
Manitowish	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
	3-4	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	55-100	50-100	35-95	15-55	0-25	NP-7
		loam, gravelly										
		fine sandy										
		loam										
	4-16	1	SC-SM, SM	A-2-4, A-4	0	0-15	55-100	50-100	35-95	15-55	0-25	NP-7
		loam, gravelly										
		fine sandy										
		loam							!			
	16-19		GC-GM, GM,	A-1, A-2, A-3	0	0-15	45-100	40-95	20-70	0-25	0-25	NP-6
		sand, gravelly	SC-SM, SM						!			
		loamy sand,										
		sand										
	19-60	Stratified sand	,	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP, SP-SM									
	 	gravelly			1		 	[[1	1		
	 	coarse sand	 		1		 	l I		1		1
	 	coarse sand				 	 	 	 			

Map symbol	 Depth	USDA texture	Classi 	fication	Fragi	ments		rcentag sieve n	e passi: umber	ng	 Liquid	 Plas-
and		!	ļ.	ļ	>10	3-10	!				limit	ticity
soil name		<u> </u>	Unified	AASHTO		inches	4	10	40	200		index
	In				Pct	Pct		[!		Pct	
521A:	 		l I			 	 	 				
Dody	0-3	Muck	 PT	 A-8	0	l l 0	100	100				
2007	3-9	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	100	98-100	1	5-20	0-23	1
		fine sand,			i	İ	İ	İ				İ
	İ	fine sand	İ	į	İ	İ	İ	İ	i	i	İ	İ
	9-20	Fine sand,	SP-SM, SM,	A-2-4	0	0	100	98-100	85-95	10-20	0-23	NP-6
	ĺ	sand, loamy	SC-SM	ĺ	Ì	ĺ	ĺ	ĺ	İ	İ	İ	ĺ
		fine sand										
	20-23	Loamy sand,	SM, SC-SM	A-2-4	0	0	100	98-100	65-80	15-25	0-23	NP-6
		sand, loamy										
		fine sand,						!	!			
		fine sand										
	23-47	Clay, silty	CH	A-7	0	0	100	98-100	80-100	75-100	55-70	30-40
	 47 E0	clay Loamy sand,	SC-SM, SM	A-2-4	 0	 0	 100	 00 100	 65-80	115 25	0-23	 ND 6
	4/-36 	sand, loamy	SC-SM, SM	A-2-4	0	U	100	 30-100	65-60	15-25	0-23	NP - 0
	 	fine sand,	 	i I	i i	 	 	l I		 	 	
	 	fine sand		l I	ŀ	 	 	 	i	i i	 	
	58-80	Sand, loamy	SC-SM, SM	A-2-4	0	0	100	98-100	65-80	15-25	0-23	NP-6
	İ	sand, loamy	İ	İ	į	İ	į	i	İ	i	İ	į
	İ	fine sand,	İ	j	İ	İ	į	İ	į	į	İ	į
		fine sand	ļ.	ļ		!	ļ	ļ	!	[ļ
524E:	 		l I			 						
Rock outcrop.	 		 		1	 	 	 		 	 	
ROCK OUCCIOP.	 		 	i i	İ	 	 	i	i	i i	 	
Frogcreek	0-4	Silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	20-32	2-7
-	4-13	Silt loam, silt	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	18-28	2-7
	13-19	Silt loam,	SM, SC	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-90	15-80	17-28	3-10
		loam, sandy										
		loam, gravelly										
		sandy loam										
	19-32	Sandy loam,	SM, SC	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
		loam, gravelly			ļ							
		sandy loam									110 20	
	3∠-46 	Gravelly sandy	am, ac 	A-1-b, A-2-4	0-5	0-7	 00-T00	50-90 	30-80	12-02	120-30	3-12
	l I	loam, loam	I I	I I	1	l I	I I	 		1	 	I I
	 46-80	Gravelly loamy	SC-SM. SM	A-1, A-2-4	0-5	 0-7	 60-100	 50 - 90	 25-70	10-25	0-23	 NP-6
	10 00	sand, loamy	SP-SM		0 5	, o ,			-3 , 3	-0 23	0 23	
	!	Julia, Loumy	D.	!	!	!	!	!	!	!	!	!

sand

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	İ	ments		rcentag sieve n	e passi: umber	ng	Liquid	1
and soil name		 	Unified	AASHTO	>10	3-10	 4	10	40	200	limit	ticit; index
BOII Hame	In]		AADIIIO	Pct	Pct	<u>*</u> 			200	Pct	Index
524E:				 	 		 	 	 	 		
Metonga	0-3 3-4	Silt loam Very fine sandy loam, silt loam, fine sandy loam	•	A-4 A-4 	2-3 0 				90-100 65-100 		0-23 0-25 	1
	4-25	Very fine sandy loam, silt loam, fine sandy loam	CL-ML, ML, SC-SM, SM 	A-4 	0 	0-7 	95-100 	90-100 	65-100 	35-85 	0-25 	NP - 7
	25-28	Sandy loam, gravelly fine sandy loam	SM 	A-1-b, A-2-4 	0 	0-15 	 55-95 	50-90 	30-75 	 15-50 	0-20	NP - 4
	28-80	Unweathered bedrock	 	 	 		i !	 	i !	 	i	i !
542B:					 		 		 	 		
Haugen, very												
stony	0-4	Sandy loam		A-2-4, A-4	0-5				50-70		19-32 16-28	3-9
	4-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam	SC-SM, SM 	A-1, A-2, A-4 	0-5 	0-7 	55-100 	50-90 	35-85 	 	16-28 	1-9
	15-23	Gravelly sandy loam, sandy loam, fine sandy loam,	SC-SM, SM	A-1, A-2, A-4 	0-5 	0-7 	 55-100 	 50-90 	35-75 	15-45 	16-28 	1-9
	23-35	gravelly loam Gravelly sandy loam, sandy loam, gravelly fine sandy	İ	 A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 16-27 	 2-10
	35-49	gravelly sandy loam, fine	 sc, sm 	 A-2, A-4, A-1 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 17-28 	 3-10
	49-79	sandy loam Gravelly sandy loam, sandy loam, fine sandy loam	 sc, sc-sm 	 A-1, A-2 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 18-30 	 4-12
	79-80	sandy loam Gravelly sandy loam, sandy loam, fine sandy loam	 SC-SM, SM, SC 	 A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 17-27 	 3-10

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	İ	ments		_	e passi umber	_	 Liquid	
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct	 				Pct	
542B:				i I			 					
Haugen	0 - 7	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	7-15	Sandy loam, gravelly sandy loam, fine sandy loam, gravelly loam		A-1, A-2, A-4 	0-5 	0-7 	55-100 	50-90 	35-85 	15-65 	16-28 	1-9
	15-23	Gravelly sandy loam, sandy loam, fine sandy loam, gravelly loam	SM, SC-SM 	A-1, A-2, A-4 	0-5	0-7 	 55-100 	 50-90 	35-75 	15-45	 16-28 	 1-9
	23-35	Gravelly sandy loam, sandy loam, gravelly fine sandy loam	j	A-1, A-2, A-4 	0-5	0-7 	 55-100 	50-90 	35-75 	15-45	16-27 	2-10
	35-49	Sandy loam, gravelly sandy loam, fine sandy loam	 SC, SM 	 A-2, A-4, A-1 	0-5	0-7 	 55-100 	 50-90 	35-75	15-45	 17-28 	3-10
	49-79	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM	A-1, A-2 	0-5	0-7 	 55-100 	50-90 	35-75	15-45 	18-30 	4-12
	79-80	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SM, SC-SM 	A-1, A-2, A-4 	0-5 	0-7	55-100 	50-90 	35-75 	15-45 	17-27 	3-10

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	i	ments		_	e passi umber	-	Liquid	
and soil name	 		Unified	AASHTO	>10 inches	3-10		10	40	200	limit 	ticit; index
	In				Pct	Pct	<u> </u>		<u> </u>	į	Pct	<u> </u>
542C:	 		 	 	 	 	 	 				
Haugen, very	İ	İ	İ	İ	į	į	İ	į	İ	İ	İ	İ
stony	0-4	Sandy loam	SC-SM, SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	4-15 	Sandy loam, gravelly sandy loam, fine sandy loam,		A-1, A-2, A-4	0-5	0-7 	55-100 	50-90 	35-85	15-65	16-28	1-9
	 15-23 	gravelly loam Gravelly sandy loam, sandy loam, fine sandy loam,	 SC-SM, SM 	 A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 16-28 	 1-9
	 23-35 	gravelly loam Gravelly sandy loam, sandy loam, gravelly fine sandy loam	İ	 A-1, A-2, A-4 	 0-5 	 0-7 	 55-100 	 50-90 	 35-75 	 15-45 	 16-27 	 2-10
	 35-49 		 SM, SC 	 A-2, A-4, A-1 	 0-5 	 0-7 	 55-100 	 50-90 	35-75	 15-45 	 17-28 	 3-10
	 49-79 	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SC-SM 	A-1, A-2 	0-5 	0-7 	55-100 	50-90 	35-75	15-45	18-30	4-12
	79-80 	Gravelly sandy loam, sandy loam, fine sandy loam	SC, SM, SC-SM 	A-1, A-2, A-4 	0-5	0-7 	55-100 	50-90 	35-75	15-45 	17-27 	3-10

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Fragi	ments		rcentag sieve n	e passi: umber	ng	 Liquid	 Plas
and					>10	3-10	l				limit	ticit
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
542C:			 	 			 		 			
Haugen	0-7	Sandy loam	SM, SC-SM	A-2-4, A-4	0-5	0-7	85-100	75-98	50-70	20-40	19-32	3-9
	7-15	Sandy loam,	SM, SC-SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-85	15-65	16-28	1-9
		gravelly sandy										
		loam, fine										
		sandy loam,										
		gravelly loam										
	15-23	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-75	15-45	16-28	1-9
		loam, sandy										
		loam, fine										
		sandy loam,										
		gravelly loam										
	23-35	Gravelly sandy	SC-SM, SM	A-1, A-2, A-4	0-5	0-7	55-100	50-90	35-75	15-45	16-27	2-10
		loam, sandy			!					!		!
		loam, gravelly										
		fine sandy										
		loam										
	35-49	Sandy loam,	SC, SM	A-2, A-4, A-1	0-5	0-7	55-100	50-90	35-75	15-45	17-28	3-10
		gravelly sandy										
		loam, fine sandy loam	 	 			 		l I			
	 40.70	Gravelly sandy	 cc.cw.cc	 A-1, A-2	0-5	0-7	 EE 100			 1= 1=	 18-30	 4-12
	1 3-73	loam, sandy	SC-SM, SC	A-1, A-2 	0-5	0-7	122-100	50-90	33-75	122-42	10-30	4-12
		loam, fine	 	 	1	 	l I	 	l l	 		
		sandy loam	 	 	İ	 	 	 	l I	i		
	 79-80	Gravelly sandy	∣ İsm. sc-sm. sc	∣ A-1. A-2. A-4	0-5	0-7	 55-100	50-90	 35-75	 15-45	17-27	3-10
	// 00	loam, sandy		,, 		• .						0 20
		loam, fine		 	i	<u> </u>	İ	i	İ	i		i
		sandy loam	İ		İ	i	İ	İ	İ	İ	i	i
543B:				 			 					
Anigon	 0-10	 Gilt loam	CL, CL-ML	 A-4	0	0-7	 95_100	 90_100	80-100	 65-90	0-30	 NP-11
Anigon		Silt loam, silt			0				80-100			NP-11
		Silt loam	ML, CL	A-4, A-6	0				80-100			NP-11
		Silt loam	CL, ML	A-4, A-6	0				80-100			NP-11
		Sandy loam,	1	A-1, A-2,	0				30-90		1	NP-13
		loam, gravelly	1	A-4, A-6	į į					i		i
		loam	İ		i	i	į	i	İ	i	i	i
	34-60	Stratified sand	GP, GP-GM,	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	SP, SP-SM	i İ	İ	i	į	i	İ	į	i	i
		gravelly	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
		coarse sand	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
		I								I		

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments	Pe	rcentag	e passi:	ng		
Map symbol	Depth	USDA texture					:	sieve n	umber		Liquid	
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct		ļ			Pct	
543C2:		 	 	 				 	 			
Anigon	0-10	Silt loam	CL-ML, CL	A-4	0	0-7	95-100	90-100	80-100	65-90	0-30	NP-11
İ	10-14	Silt loam, silt	ML, CL-ML, CL	A-4	0	0-7	95-100	90-100	80-100	65-90	0-30	NP-11
İ	14-20	Silt loam	CL, ML	A-4, A-6	0	0-7	95-100	90-100	80-100	65-90	0-30	NP-11
j	20-30	Silt loam	ML, CL	A-4, A-6	0	0-7	95-100	90-100	80-100	65-90	0-30	NP-11
j	30-34	Sandy loam,	SC	A-1, A-2,	0	0-7	50-100	45-100	30-90	15-45	0-32	NP-13
İ		loam, gravelly loam	 	A-4, A-6	i I	i I	i I	l I	i I	į I	İ	i I
 	34-60	Stratified sand to very gravelly coarse sand	SP-SM, SP, GP-GM, GP	A-1, A-2, A-3 	0 	0-7 	45-100 	40-95 	 15-65 	0-15 	0-14 	NP
544F:			 	 								
Menahga 	0-1	Slightly decomposed plant material	PT 	A-8 	0 	0 	100 	100 	 	 		
	1-2	Sand	SM	A-2, A-3	0	0	95-100	85-100	55-70	5-15	0-14	NP
 	2-25	Sand, loamy	SM 	A-2, A-3 	0 	0 	95-100 	85-100 	55-75 	5-20 	0-14	NP
İ	25-80	Sand, coarse sand	SM 	A-2, A-3	0	0	95-100	85-100	 55-70 	5-15	0-14	NP
Mahtomedi	0-5	Loamy sand	SC-SM, SM	 A-2	0	0-3	85-100	 75-100	 40-75	20-30	0-28	 NP-10
	5-8		SM, SP-SM	A-2, A-3	0	0-3	1	75-100 		1	0-23	
	8-15	Gravelly coarse sand, coarse sand, gravelly sand, sand	İ	 A-1 	 0 	0-15 	 60-95 	 50-90 	 25-65 	2-15 	0-23	NP-6
 	15-30	Gravelly sand, coarse sand, sand	SM, SP-SM	 A-1, A-2, A-3 	 0 	0-15 	 60-95 	 50-90 	 25-65 	 2-15 	0-23	 NP - 6
	30-60	Gravelly sand,	SM, SP-SM	 A-2, A-3, A-1 	 0 	0-15	 55-95 	50-90	25-65	0-15	0-23	NP-6

				C	lassif	icati	on		Fragi	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture	<u> </u>									sieve n	umber		Liquid	
and									>10	3-10			1		limit	
soil name		<u> </u>	τ	Jnif	ied	A	ASHTO)		inches	4	10	40	200		index
	In								Pct	Pct	!	!	ļ	!	Pct	ļ
555A: Fordum	0-6	 Silt loam	l at	мт	CL-ML		7 6		0	 0-7		 75 100	 70-100	 6E 0E		3-15
roraum		Silt loam Silt loam, fine					A-0 A-2,	7 - 4		!	1		35-100		1	3-15
	0-10	sandy loam,	SC	ш,	CI,	A-1,	A-2,	A-1		0-13	00-100	120-100	33-100	122-83	0-30] 3-10
		mucky sandy	50							 	i	i	l I	i		İ
		loam, gravelly				ì				! 	i		İ	İ		i
		loam	<u> </u>			i				! 	i	i	İ	i		i
	18-30	Fine sandy	CL,	SM,	sc,	A-1,	A-2,	A-4	0	0-15	60-100	50-100	30-100	15-85	0-30	3-10
		loam, silt	ML			İ			İ	İ	i	i	İ	i	İ	İ
		loam, mucky	İ			Ì			İ	İ	į	İ	İ	İ	İ	İ
		sandy loam,	ĺ			Ì				ĺ	İ	ĺ	ĺ	ĺ	İ	ĺ
		gravelly loam														
	30-60	Sand, very	SP,	GP,		A-1,	A-2,	A-3	0	0-15	30-100	25-100	7-95	1-50	0-14	NP
		gravelly loamy	SP.	-SM,	SM											
		fine sand,				ļ					!	!	ļ	!		
		gravelly									!			!		
		coarse sand,														
		fine sand														
574B:		 	 			l I				l I	 	l I	l I	l I	l I	l I
Sayner	0-2	Loamy sand	SM			A-1			0	0-15	 85-100	 75-100	 45-75	 15-30	0-14	 NP
buyner	2-4		SP-S	SM.	SM	A-1			0		85-100			10-30	0-14	NP
		sand		,						0 20						
	4-7	Loamy sand,	SP-	SM,	SM	A-1,	A-3		0	0-15	70-100	50-100	25-75	3-30	0-14	NP
		sand, gravelly	İ			İ				İ	i	İ	İ	İ	i	İ
		coarse sand,	İ			İ			İ	j	į	İ	İ	İ	j	İ
		loamy coarse														
		sand														
	7-14	Sand, loamy	SP-S	SM,	SM	A-1,	A-3		0	0-15	70-100	50-100	25-75	3-30	0-14	NP
		sand, gravelly														
		sand, loamy														
		coarse sand				ļ					!	!	ļ	!		
	14-22	Gravelly sand,	SP-S	SM,	SP, SM	A-1,	A-3		0	0-15	70-100	50-100	25-75	3-30	0-14	NP
		loamy sand,														
		coarse sand,														
		loamy coarse												!		
	22 60	sand	 ap '	734	CD.				0	0 15	 60-85	 40 0F	 25 45	0 10	0-14	 NP
	22-60	Stratified sand to very	5P-5	oM,	DP .	A-1			U	U-15	00-85	40-85 	25-45	0-10	U-14	NP
		gravelly	l I			I I] 	l I		[[I I	I	
		gravelly coarse sand	l I			[[l I		[[1	 	1	1
		Coarse sand	1			1				l I	1	I	1	I	1	1

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	c:	lassifi	.cati	on	Fragi			rcentage sieve n	-	-	Liquid	
and soil name	 	 	 Unif:	 bei	20.	ASHTO	>10	3-10 inches	 4	10	40	200	limit	ticity index
BOII Hame	In	<u> </u>				ADIIIO	Pct	Pct	-	10	10	200	Pct	Index
574C:	 								 	 	 			
Sayner	0-2	Loamy sand	SM		A-1		0					15-30		NP
	2-4 	Loamy sand, sand	SM, SP-S	į	A-1		0		İ	75-100 			0-14	NP
	4-7 	Loamy sand, sand, gravelly coarse sand, loamy coarse sand	SM, SP-8 	SM 	A-1,	A-3	0 	0-15 	70-100 	50-100 	25-75 	3-30	0-14 	NP
	7-14 	Sand, loamy sand, gravelly sand, loamy coarse sand	 SM, SP-8 	sm 	A-1,	A-3	0	0-15	 70-100 	 50-100 	 25-75 	3-30	0-14	 NP
	14-22 	Gravelly sand, loamy sand, coarse sand, loamy coarse sand	SM, SP, 	SP-SM	A-1,	A-3	0	0-15	 70-100 	 50-100 	 25-75 	3-30	0-14 	NP
	22-60 	Stratified sand to very gravelly coarse sand	SP, SP-8 	sm 	A-1		0	0-15	60-85 	40-85 	 25-45 	0-10	0-14	 NP
574E:	 	 	 					 	 	 	 			
Sayner	0-2	Loamy sand	SM	į	A-1		0	0-15	85-100	75-100	45-75	15-30	0-14	NP
	2-4	Loamy sand,	SP-SM, S	SM	A-1		0	0-15	85-100	75-100 	40-75	10-30	0-14	NP
	4-7 	Loamy sand, sand, gravelly coarse sand, loamy coarse sand	SM, SP-8 	SM 	A-1,	A-3	0 	0-15 	70-100 	50-100 	25-75 	3-30	0-14 	NP
	7-14 	Sand, loamy sand, gravelly sand, loamy coarse sand	SM, SP-8 	sm 	A-1,	A-3	0	0-15	70-100 	50-100 	 25-75 	3-30	0-14 	NP
	14-22 	Gravelly sand, loamy sand, coarse sand, loamy coarse sand	SM, SP, 	SP-SM	A-1,	A-3	0	0-15	70-100 	50-100 	25-75 	3-30	0-14	NP
	22-60 	Stratified sand to very gravelly coarse sand	SP, SP-8 	SM 	A-1		0	0-15	 60-85 	 40-85 	 25-45 	0-10	0-14	 NP

Table 23.--Engineering Index Properties--Continued

Map symbol and soil name	Depth In	USDA texture	Classification		Fragments		Percentage passing sieve number				 Liquid	
			Unified	AASHTO	>10 inches	3-10 inches	 4 10 40 200					ticity
							4	1 10	40	200	Pct	index
	111 	1	 	 	PCC 	PCC 	 	 	 		PCt	
579B:	İ	İ			İ	İ	İ	İ	i	İ	i	İ
Parkfalls	0 - 5	Sandy loam	SM	A-2-4	0-5	1				25-40		1-10
	5-8 	Sandy loam, fine sandy	CL-ML, ML,	A-2, A-4 	0-5 	0-7 	90-100 	85-100 	55-95 	25-75	17-28 	2-7
		loam										
	8-17 	Sandy loam, loam, gravelly fine sandy loam	ML, CL-ML, SM, SC-SM 	A-2, A-4 	0-5 	0-7 	90-100 	70-100 	55-95 	25-75	18-30 	3-9
	 17-30 	Sandy loam, gravelly sandy loam	SM, SC-SM	 A-2, A-4 	0-5 	 0-7 	 75-100 	 70-100 	 40-70 	20-40	18-28	3-10
	30-33 	Sandy loam, gravelly sandy loam	 SC-SM 	 A-2, A-4 	0-5	0-7 	 75-100 	 70-100 	40-70 	20-40	19-29	5-11
	33-48 	Sandy loam, gravelly sandy loam	SC-SM 	A-1-b, A-2 	0-5	0-7 	75-100 	70-100 	35-75 	15-30	18-28	4-10
	48-80 	Loamy sand, gravelly loamy sand	GC-GM, SC-SM, SM, GM	A-1-b, A-2 	0-5	0-7	60-95 	55-90 	30-75	10-25	0-23	NP - 6
600A:	 	 	 	 	 	 	 		 			
Haplosaprists.	! 				! 		! 		i			İ
	İ	İ	İ	İ	İ	İ	ĺ	İ	İ	j	İ	İ
Psammaquents.]	 	 	 	 	 	[[[[[[
615B:					 0	 0-5					0-28	 NP-9
Cress	0-3 3-15	Sandy loam Sandy loam,	SM, SC	A-2-4, A-4 A-2-4, A-4	0 0			80-100 80-100		25-45	0-28	
		fine sandy			i I	 	 	i i				
	15-31 	Loamy sand, coarse sand, gravelly sand,	SM, SP-SM	A-3 	0 	0-5	55-100 	50-95	20-75	0-30	0-21	NP - 4
	 	very gravelly loamy sand	 	 	 	 	 					
	31-36	Gravelly loamy	SP-SM, SM	 A-3	0	0-5	 55-100	50-100	20-75	0-30	0-21	NP - 4
	 	sand, coarse sand, gravelly sand, very gravelly loamy sand	j	 	 	 	 	 	 			
	36-60 	Stratified sand to very gravelly coarse sand	 GP, GP-GM, SP-SM, SP 	 A-1, A-2, A-3 	 0 	 0-5 	30-100 	 25-95 	 15-65 	0-15	0-14	NP

Table 23.--Engineering Index Properties--Continued

	Depth	USDA texture	Classification		Fragi	ments		rcentag	_	ng	 Liquid	 Plas-
and					>10	3-10	l				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	ļ		1	Pct	Pct			[<u> </u>	Pct	
615C:		 				 						
Cress	0-3	Sandy loam	SM, SC	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
	3-15 	Sandy loam, fine sandy loam	SM, SC	A-2-4, A-4	0 	0-5 	 85-100 	80-100 	55-80 	25-45	0-28	NP-9
	15-31 	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM 	A-3 	0 	0-5 	55-100 	50-95 	20-75 	0-30	0-21 	NP - 4
	31-36	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3 	0 	 0-5 	 55-100 	 50-100 	 20-75 	0-30	0-21 	 NP - 4
	36-60	Stratified sand to very gravelly coarse sand	SP-SM, GP, GP-GM, SP 	A-1, A-2, A-3	0 	0-5 	30-100 	 25-95 	 15-65 	0-15	0-14 	NP
615D:		İ						İ			İ	
Cress	0-3	Sandy loam	SM, SC	A-2-4, A-4	0	0-5				25-45	,	
	3-15 	Sandy loam, fine sandy loam	SC, SM 	A-2-4, A-4 	0 	0-5 	85-100 	80-100 	55-80 	25-45 	0-28 	NP - 9
	15-31 	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM 	A-3 	0 	0-5 	55-100 	50-95 	20-75 	0-30	0-21 	NP - 4
	31-36 	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3 	0 	0-5 	55-100 	50-100 	20-75 	0-30	0-21 	NP - 4
	36-60	Stratified sand to very gravelly coarse sand	 SP-SM, GP, SP, GP-GM 	A-1, A-2, A-3 	 	 0-5 	 30-100 	 25-95 	 15-65 	0-15 	0-14 	 NP

Map symbol	Depth	USDA texture	Classif	ication	Frag	ments	1	_	e passi: umber	_	 Liquid	 Plas-
and					>10	3-10					limit	ticity
soil name		İ	Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
623A:			 	 	İ							
Capitola	0-5	Muck	PT	A-8	0	0	100	100	100	100		NP
	5-7	Silt loam, loam	CL-ML, CL	A-4	0-5	0-7	80-100	75-100	60-100	50-90	23-26	6-8
	7-22 	loam, sandy	ML, SC, CL, CL-ML, SC-SM, SM	A-2-4, A-4 	0-5 	0-7 	80-100 	75-100 	45-100 	20-90 	0-28	NP - 9
	 22-33 	sandy loam Sandy loam, fine sandy loam, gravelly	 sc, sm 	 A-1-b, A-2-4, A-4 	 0-5 	 0-7 	 60-100 	 50-90 	 30-90 	 15-70 	 0-26 	 NP - 8
	33-60	loam Sandy loam,	SC-SM, SM	A-1-b, A-2-4	0-5	0-7	 60-100	50-90	30-60	15-35	0-21	 NP - 4
	loam, gra	fine sandy loam, gravelly sandy loam	 	 	 	 	 	 	 	 	 	
624A:												
Ossmer	0 - 4	Silt loam	ML, CL-ML	A-4	0	0-7	95-100	90-100	70-100	65-85	18-25	3-7
	4-6	Silt loam	ML, CL-ML	A-4	0	0-7	95-100	90-100	70-100	65-85	0-25	NP-7
	6-11	Silt loam	CL-ML, ML, CL	A-4	0	0-7	95-100	90-100	70-100	65-85	15-28	NP-9
	11-26	Silt loam	CL, ML, CL-ML	A-4	0	0-7	95-100	90-100	70-100	65-85	15-28	NP-9
	26-34 	Loam, sandy loam, gravelly sandy loam		A-1, A-2, A-4 	0 	0-7 	55-100 	50-100 	30-95 	15-80 	0-28	NP - 9
į į	34-38 	Sandy loam, gravelly sandy loam, loam		A-1, A-2, A-4 	0 	0-7 	55-100 	50-100 	30-95 	15-80 	0-28 	NP - 9
	38-60 	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0 	0-7	45-100 	40-95 	15-65 	0-15 	0-14	NP

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		rcentage	_	-	Liquid	Plas-
and	202011			1	- >10	3-10		52010 11			limit	
soil name			Unified	AASHTO		inches	4	10	40	200		index
	In			1	Pct	Pct	İ	İ	1	i i	Pct	
632A:												
Aftad	 010	 Fine sandy loam	 CM	 A-4	0	0	 0E 100	 90-100	 6E 00	25 50	0-18	 NP-3
Altau		Fine sandy	SM, CL-ML,	A-2-4, A-4	0	0	1	90-100		1		
	10-23	loam, very	ML, SC-SM	A-2-4, A-4 	0	0	33-100	30-100	1 43-33	23-73	0-23	NF - 0
		fine sandy	MI, BC-BM	 		 		İ	 	1		
		loam, loam,	 	 		 		i i	 	1		
	 	loamy sand	i I	İ		 	i	i i	i I	ì		
	29-36	Fine sandy	SM, CL, ML,	A-4	0	0	95-100	90-100	 65-95	40-75	18-26	 NP-8
	27 00	loam, very	SC SC	 								
		fine sandy		i		İ	i	i	i	i		i
	i	loam, sandy	i	i	i	İ	i	i	i	i	i	İ
	İ	loam, loam	İ	į	i	İ	i	İ	İ	i	i	İ
	36-41	Fine sandy	SC, ML, CL,	A-4	0	0	95-100	90-100	65-95	40-75	18-26	NP-8
	İ	loam, very	SM	İ	j	İ	i	i	į	i	i	į
	İ	fine sandy	İ	Ì	j	İ	į	İ	į	İ	İ	į
		loam, sandy	İ	ĺ	İ	İ	İ	İ	ĺ	İ	İ	ĺ
		loam, loam	İ	ĺ	İ	İ	İ	ĺ	ĺ	İ	İ	ĺ
	41-60	Stratified fine	ML, SM,	A-4	0	0	95-100	90-100	60-95	35-75	0-25	NP-7
		sand to silt	SC-SM, CL-ML	ļ				[ļ	ļ		ļ
632B:	 			 		 		 	 			
Aftad	0-10	Fine sandy loam	SM	A-4	0	0	95-100	90-100	65-90	35-50	0-18	NP-3
		Fine sandy	CL-ML, ML,	A-2-4, A-4	0	0	95-100	90-100	45-95	25-75	0-23	NP-6
		loam, very	SC-SM, SM	i	i	İ	i	İ	İ	i	i	İ
	İ	fine sandy	İ	İ	j	İ	i	i	į	i	i	į
	İ	loam, loam,	İ	Ì	j	İ	į	İ	į	İ	İ	į
		loamy sand	İ	ĺ	İ	İ	İ	İ	ĺ	İ	İ	ĺ
	29-36	Fine sandy	SC, SM, ML,	A-4	0	0	95-100	90-100	65-95	40-75	18-26	NP-8
		loam, very	CL	ĺ	İ	İ	İ	ĺ	ĺ	İ	İ	ĺ
		fine sandy										
		loam, sandy										
		loam, loam										
	36-41	Fine sandy	CL, ML, SC,	A-4	0	0	95-100	90-100	65-95	40-75	18-26	NP-8
		loam, very	SM	1								
		fine sandy										
		loam, sandy										
		loam, loam										
	41-60	Stratified fine	CL-ML, ML,	A-4	0	0	95-100	90-100	60-95	35-75	0-25	NP-7
		sand to silt	SC-SM, SM									

Soi
Su
√e)
호

	Depth	USDA texture	Classif	ication	Fragi	ments		rcentago sieve n	_	-	 Liquid	 Plas
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	!		ļ	Pct	Pct					Pct	
632C:			 	 	 	 	 	 	 			
Aftad	0-10	Fine sandy loam	SM	A-4	0	0	95-100	90-100	65-90	35-50	0-18	NP-3
į	10-29	Fine sandy	CL-ML, ML,	A-2-4, A-4	0	0	95-100	90-100	45-95	25-75	0-23	NP-6
j		loam, very	SC-SM, SM	ĺ	İ	ĺ	ĺ	ĺ	ĺ	İ	İ	ĺ
I		fine sandy										
I		loam, loam,										
ļ		loamy sand										
ļ	29-36	Fine sandy	CL, ML, SC,	A-4	0	0	95-100	90-100	65-95	40-75	18-26	NP-8
ļ		loam, very	SM									
		fine sandy										
		loam, sandy										
		loam, loam										
	36-41	Fine sandy		A-4	0	0	95-100	90-100	65-95	40-75	18-26	NP-8
		loam, very	SM	!	!							!
ļ		fine sandy		!	!				!			!
		loam, sandy										!
		loam, loam										ļ
	41-60	Stratified fine		A-4	0	0	95-100	90-100	60-95	35-75	0-25	NP - 7
		sand to silt	ML, SC-SM	 	 	 	 	 	 			
633F:				 			! 	! 				
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
ļ	3-8	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
		loam, fine										
		sandy loam,										
		loamy sand										
	8-15	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
		loam, sandy		A-4	!							!
ļ		loam, loam,		!	!				!			!
		fine sandy										
		loam										
	15-21	Gravelly coarse	'	A-1-b, A-3	0	0-15	45-100	40-95	20-70	2-30	0-14	NP
		sand, loamy	SM, GM				 			1		
		sand, sand,	 	 		 	 	 	 			
I		loamy fine sand	l I	 	 	 	 	 	 		1	
	21_60	sand Stratified sand	CD CD CM	 A-1, A-2, A-3	 0	 0-1E	 45 - 100	 40-95	 15_65	0-15	0-14	 NP
I	21-00	to very	SP, GP-GM	A-1, A-2, A-3	0	0-13	1 -2-100	=0-33 	1 - 2 - 62	1 0-13	0-14	NF
I		gravelly	DF, GF-GM	 	 	 	l I	l I	l I			I I
I			 	I I	1	I I	1	!	I .	1	!	I I
l l		coarse sand					l	1				1

Table 23.--Engineering Index Properties--Continued

Map symbol and	 Depth	USDA texture	Classif:	ication	İ	ments		rcentag sieve n	-	-		 Plas-
					>10	3-10					limit	ticity
soil name	 	1	Unified	AASHTO		inches	4	10	40	200		index
	In	 	 	 	Pct	Pct	 	l I	 		Pct	l I
633F:			! 	! 		 	 					
Padus	0-2	Sandy loam	SM	A-1-b, A-2, A-4	0	0-7	80-100	 75-100 	30-90	20-50	0-21	NP - 4
	2-3	Sandy loam, fine sandy loam, loam	SM, SC-SM 	A-1-b, A-2, A-4	0	0-7 	 80-100 	75-100	30-90 	20-60	0-23	NP - 6
	 3-19 	1	SM, SC, SC-SM	A-1-b, A-2, A-4	0 	 0-7 	 80-100 	 75-100 	30-90	20-60	0-26	NP - 8
	19-26 		 SM, SC-SM, SC 	 A-1, A-2, A-4 	 0 	 0-7 	 55-100 	 50-100 	 30-90 	 15-55 	0-28	 NP - 9
	26-38 			 A-1, A-2, A-4 	 	 0-7 	 55-100 	 50-100 	30-90 	15-55	0-28	 NP - 9
	38-60	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3	0	0-15 	45-100 	40-95 	15-65 	0-15	0-14	NP
648B:			 	 	 	 	 	 	 			
Sconsin	0-4	Silt loam	CL-ML	 A-4	0	0-7	92-100	91-100	81-94	64-76	24-32	5-9
	4-5	1		A-4	0	0-7		91-100				2-9
	5-10	Silt loam	CL-ML, ML	A-4	0	0-7	92-100	91-100	79-96	62-77	17-28	2-9
	10-18	Silt loam	CL-ML, ML	A-4	0	0-7	92-100	91-100	79-96	62-77	17-28	2-9
	18-27	Silt loam	CL-ML, ML	A-4	0	0-7	92-100	91-100	79-96	62-77	17-28	2-9
	27-34 	Loam, gravelly sandy loam, very gravelly fine sandy loam	ML, SM, SC, CL 	A-2, A-4 	0 	0-15 	50-100 	45-100 	37-92 	26-67 	18-29 	3-11
	34-38	Sandy loam, gravelly loam, very gravelly fine sandy loam	SM, SC 	A-1-b, A-2, A-4 	0 	0-15 	54-100 	50-100 	36-82 	17-43 	 17-27 	3-10
	38-60	Stratified sand to very gravelly coarse sand	GP, GP-GM, SP, SP-SM	A-1, A-2, A-3 	0 	0-15 	30-96 	27-95 	15-58 	3-15 	0-20	NP - 3

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif:	ication	Fragi	ments		rcentago sieve n	_	-	 Liquid	 Plas
and	Dopon	ODDII CCRCGIC		1	>10	3-10	¦ '	51010 11	umber		limit	
soil name	 		Unified	AASHTO	1	inches	4	10	40	200		index
	l In	1	1		Pct	Pct	1 -	1	1	1	Pct	
	111		 	 	FCC	FCC	 	 	l I		FCC	
670C:	 		 	 	ì	 		l I	 	ì	 	l I
Keweenaw	0-2	Sandy loam	SC, SC-SM, SM	A-2	0-2	0-20	90-100	75-100	55-80	20-40	0-20	NP-10
	2-4	Cobbly loamy	SM, SC-SM, SC		0					15-35	,	2-10
	İ	sand, gravelly		A-2-4	i	i	i	İ	İ	i	i	i
		loamy fine	İ		i	i	i	İ	İ	i	İ	İ
	İ	sand, loamy	İ		i	į	i	i	į	i	İ	İ
	İ	sand, sandy	İ		İ	į	į	İ	į	İ	İ	İ
		loam	İ		ĺ	İ	İ	İ	ĺ	İ	İ	ĺ
	4-16	Loamy sand,	SC, SC-SM, SM	A-2, A-1-b,	0	0-25	85-100	65-100	45-75	15-35	16-27	2-10
		gravelly loamy		A-2-4								
		sand, cobbly										
		loamy fine										
		sand, sandy										
		loam	!				!	!	!	!		
	16-20	Loamy sand,		A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SM, SP-SM									
		fine sand,								-		
		gravelly loamy sand	 	 					 			
	 20 27		SP-SM, SM,	 A-1-b, A-2,	0	0 25	 0E 100	 65 100	 4E 7E	10-25	0 22	 NP-10
	20-27	cobbly sand,	SC-SM, SC	A-1-D, A-2,	0	0-25	102-100	102-100	45-75	10-25	0-23	NP-IU
	l I	gravelly loamy		A-2-4 		 	 	l I	I I		1	1
	 	fine sand	i I		1	 	i	i i	İ	ì		i
	27-43	Sand, cobbly	SC-SM, SC,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80	5-20	0-27	NP-10
		loamy sand,	SM, SP-SM	A-2, A-2-4	i			İ	i			i
		gravelly loamy	İ	-	i	i	i	İ	İ	i	İ	İ
	İ	fine sand,	İ		İ	į	į	İ	į	İ	İ	İ
		sandy loam	ĺ		İ	İ	İ	ĺ	ĺ	İ	j	
	43-75	Loamy sand,	SC, SC-SM, SM	A-1-b, A-2,	0	0-25	85-100	65-100	45-80	10-30	0-30	NP-10
		sandy loam,		A-2-4								
		gravelly loamy										
		fine sand,										
		fine sandy	!				!	!	!	!		ļ
		loam										
	75-80	Loamy sand,		A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		gravelly loamy	SM, SP-SM	A-2-4			1			1		
		sand, cobbly		 			1			1		
		sand	!		!	!	!	Į.	!	!	!	!

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	fication	Fragi	ments		rcentag sieve n	_	-	 Liquid	 Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In			1	Pct	Pct			[Pct	[
670C:	 				 	 	 	 				
Pence	0-3	Sandy loam	SM	A-4	0-2	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
		loam, fine										
		sandy loam,										
į		loamy sand										
	8-15	Gravelly sandy	SC-SM, SM	A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
		loam, sandy		A-4								
		loam, loam,										
		fine sandy										
		loam										
	15-21	Gravelly coarse	SP-SM, SM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70	2-30	0-14	NP
		sand, loamy	GP-GM, GM									
		sand, sand,										
		loamy fine										
		sand										
	21-60	Stratified sand	SP-SM, SP,	A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP									
		gravelly										
		coarse sand										
										1		

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif:	ication	Fragi	ments		rcentago sieve no	-	-	Liquid	 Plas
and	į	İ			>10	3-10	İ				limit	ticit
soil name	İ	İ	Unified	AASHTO	inches	inches	4	10	40	200	. 'i	index
	In	İ	İ		Pct	Pct			İ	<u> </u>	Pct	İ
670E:	 	1	 			 	 	 	 	 		
Keweenaw	0-2	Sandy loam	SC, SM, SC-SM	A-2	0-2	0-20	90-100	75-100	55-80	20-40	0-20	NP-10
	2-4	Gravelly loamy			0					15-35	17-28	2-10
	İ	fine sand,	į	A-2-4	i	İ	į	İ	i	i	i	i
	İ	loamy sand,	İ		i	İ	į	į	i	i	İ	i
	İ	sandy loam,	İ		İ	İ	į	j	İ	İ	İ	İ
	ĺ	cobbly loamy	İ		ĺ	ĺ	ĺ	ĺ	İ	İ	İ	ĺ
	ĺ	sand	İ		ĺ	ĺ	ĺ	ĺ	İ	İ	İ	İ
	4-16	Gravelly loamy	SM, SC-SM, SC	A-2, A-1-b,	0	0-25	85-100	65-100	45-75	15-35	16-27	2-10
		sand, loamy		A-2-4								
		sand, cobbly										
		loamy fine										
		sand, sandy										
		loam										
	16-20	Loamy sand,	SC-SM, SC,	A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SP-SM, SM						!			
		fine sand,							!			
	 	gravelly loamy			-							
		sand, sand								110 05		
	20-27		SP-SM, SC,	A-1-b, A-2, A-2-4	0	0-25	85-100	65-100	45-75	10-25	0-23	NP-10
	 	cobbly sand, gravelly loamy		A-2-4		 	 	l I				
	 	fine sand	 	 		l I	l I	 				1
	 27-43	Sand, cobbly	SP-SM, SC,	 A-3, A-1-b,	0	 0-25	 85-100	 65-100	40-80	5-20	0-27	 NP-10
	27 13	loamy sand,	SC-SM, SM	A-2, A-2-4		0 23	03 100	03 100	1	3 20	0 1/	10
	! 	gravelly loamy		,	i		İ	İ	i	i		i
	! 	fine sand,	İ		i		İ	İ	i	i		i
	İ	sandy loam	İ		i	İ	İ	İ	i	i	i	i
	43-75	Loamy sand,	SC-SM, SC, SM	A-1-b, A-2,	0	0-25	85-100	65-100	45-80	10-30	0-30	NP-10
	İ	sandy loam,	İ	A-2-4	İ	İ	į	j	İ	i	İ	İ
	ĺ	fine sandy	İ		ĺ	ĺ	ĺ	ĺ	İ	İ	İ	İ
		loam, gravelly										
		loamy fine										
		sand										
	75-80	Loamy sand,	SC, SC-SM,	A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		gravelly loamy	SM, SP-SM	A-2-4				!				
		sand, cobbly	ļ				ļ	ļ	ļ		-	ļ.
		sand										

Table 23.--Engineering Index Properties--Continued

	Depth USDA texture	ii_		Fragi	ments		rcentag	-	ng	 Liquid	 Plas-	
and	į -	İ		1	>10	3-10	j				limit	ticity
soil name	İ	İ	Unified	AASHTO	inches	inches	4	10	40	200	İ	index
	In	ļ	<u> </u>		Pct	Pct					Pct	
670E:	 	 	 	 		 	 	 	 			
Pence	0-3	Sandy loam	SM	A-4	0-2	0-15	80-100	75-100	50-85	20-50	0-33	NP-10
	3-8	Sandy loam, loam, fine sandy loam, loamy sand	SC-SM, SM 	A-2-4, A-4 	0 	0-15 	80-100 	75-100 	45-95 	15-55 	0-27	NP - 8
	8-15 	Gravelly sandy loam, sandy loam, loam, fine sandy loam	SM, SC-SM 	A-1-b, A-2-4, A-4 	0 	0-15 	55-100 	50-100 	30-95 	15-55 	18-31 	2-10
	15-21 	Gravelly coarse sand, loamy sand, sand, loamy fine sand	GM, SP-SM, SM, GP-GM	A-1-b, A-3 	0 	0-15 	45-100 	40-95 	20-70 	2-30	0-20	NP - 3
	21-60 	Stratified sand to very gravelly coarse sand	GP-GM, SP-SM, GP, SP	A-1, A-2, A-3 	0	0-15 	45-100 	40-95 	15-65 	0-15	0-19	NP - 2
671B:	 			 								
Spoonerhill,												
stony	0-3	Sandy loam	SC, SC-SM, SM	A-2, A-4	0-2	0-15	85-100	80-95	55-75	25-40	0-20	NP-10
	3-12 	Gravelly sandy loam, loamy sand, gravelly loamy sand	İ	A-1-b, A-2, A-4 	0 	0-15 	60-100 	50-95 	35-75 	15-40 	0-20 	NP - 10
	12-16 	Gravelly loamy sand, loamy sand, sandy loam	SP-SM, SM, SC, SC-SM	A-1-b, A-2	0 	0-15	60-100	50-95 	35-75 	10-30	0-20	NP-10
	16-34 	Loamy sand, sand, gravelly loamy sand	SC, SC-SM,	A-1-b, A-2 	0 	0-15 	 60-100 	 50-95 	35-75 	10-25	0-20	NP-10
	34-46		SC, SC-SM, SM, SP-SM	A-1-b, A-2 	0 	0-15	60-100 	50-95 	35-75 	10-25	0-20	 NP-10
	46-80	Gravelly loamy sand, loamy sand, sand	SC, SC-SM,	A-1-b, A-2 	0 	0-15 	60-100 	50-95 	35-75 	10-25	0-20	NP-10

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication		Fragi	ments		rcentag sieve n	-	ng	 Liquid	 Plas
and	į	İ			i	>10	3-10	İ				limit	ticit
soil name	İ	İ	Unified	AASHT	ro :	inches	inches	4	10	40	200	İ	index
	In	ļ				Pct	Pct					Pct	
671B:	 	 	 										
Spoonerhill	0-3	Sandy loam	SM, SC-SM, SC	A-2, A-4	ı į	0	0-15	85-100	80-95	55-75	25-40	0-20	NP-10
	3-12	Gravelly sandy	SC-SM, SC, SM	A-1-b, A	1-2,	0	0-15	60-100	50-95	35-75	15-40	0-20	NP-10
		loam, loamy		A-4									
		sand, gravelly											
		loamy sand											
	12-16	Gravelly loamy	•	A-1-b, A	A-2	0	0-15	60-100	50-95	35-75	10-30	0-20	NP-10
		sand, loamy	SM, SC						!	ļ	!		
		sand, sandy											
		loam									110.05		
	16-34	Loamy sand,	SM, SC-SM,	A-1-b, A	A-2	0	0-15	 60-T00	50-95	35-75	10-25	0-20	NP-10
	 	sand, gravelly loamy sand	SP-SM, SC				 	 	l I	l I			
	 34-46	Sand, loamy	SP-SM, SM,	 A-1-b, A	1-2	0	 0-15	 60-100	 50-95	 35-75	10-25	0-20	 NP-10
	31 10	sand, gravelly		,		Ü	0 13	00 100		33 73	10 15	0 20	
	! 	loamy sand		!	i		! 	! 	i	İ	ì	İ	İ
	46-80	Gravelly loamy	SC, SM,	A-1-b, A	1-2	0	0-15	60-100	50-95	35-75	10-25	0-20	NP-10
	İ	sand, loamy	SC-SM, SP-SM		į		İ	İ	į	İ	į	į	į
		sand, sand	ĺ		ĺ				ĺ	İ	Ì	İ	ĺ
680B:	 -			 									
Stanberry, stony	 0-1	Highly	 PT	 A-8		0-5	 0-7	 100	100				
beamberry, beony	0 =	decomposed			i	0 5	, o ,	100	100		1		
	! 	plant material			i		! 	! 	<u> </u>		i		
	1-3	Sandy loam,	SM, SC-SM,	A-2-4, A	A-4	0-5	0-7	90-100	85-100	55-95	25-75	17-28	2-7
	İ	loam, fine	ML, CL-ML		į		İ	İ	į	İ	İ	į	į
		sandy loam			ĺ		ĺ	ĺ	ĺ	İ	İ	İ	ĺ
	3-19	Sandy loam,	CL-ML, ML,	A-2-4, A	4-4	0-5	0-7	90-100	70-100	55-95	25-75	18-30	3-9
		loam, gravelly	SC-SM, SM										
		fine sandy											
		loam											
	19-24	Sandy loam,	SC-SM, SM	A-2-4, A	1-4	0-5	0-7	75-100	70-100	40-70	20-40	18-28	3-10
		gravelly sandy		 			 						
	1 24 22	loam Sandy loam,	 SC-SM	 A-2-4, A		0-5	 0-7	 75 100	 70-100	140 70	20 40	110 20	 5-11
	44-34 	gravelly sandy	1	A-4-4, A 	1-4	0-5	U-/ 	 /3-100	 /U-IUU	1 0 - / 0	20-40 	13-29	 2-TT
	 	loam	 	 			 	 	 	l l		1	I I
	32-42	Loamy sand,	SM, SC-SM	 A-1-b, A	1-2-4	0-5	 0-7	75-100	 70-100	35-75	15-30	16-23	2-6
		gravelly loamy		~,									
	İ	sand	į		i			İ	İ	İ	İ	İ	i
	42-80	Loamy sand,	GC-GM, SC-SM,	A-1-b, A	A-2-4	0-5	0-7	60-95	55-90	30-75	10-25	0-23	NP-6
		gravelly loamy	•		į				į	İ	į	İ	İ
		sand			į								
					į				1				

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif:	ication	Fragi			rcentag sieve n	_	-	Liquid	
and soil name		 	Unified	AASHTO	>10	3-10 inches	 4	10	40	200	limit	ticity index
SOII Hame	In			AASHIO	Pct	Pct	<u> </u>	10	40	200	Pct	Index
680B:						 						
Pence, stony	0-3	 Sandy loam	 SM	 A-4	 0	 0-15	 80-100	 75-100	 50-85	20-50	0-21	 NP - 4
·	3-8	Sandy loam, loam, fine sandy loam,	SM, SC-SM 	A-2-4, A-4 	0 	0-15	80-100 	75-100 	45-95 	15-55	0-25	NP - 7
	8-15	loamy sand Gravelly sandy loam, sandy loam, loam, fine sandy loam	 SM, SC-SM 	 A-1-b, A-2-4, A-4 	 0 	 0-15 	 55-100 	 50-100 	 30-95 	 15-55 	 0-25 	 NP - 7
	15-21	Gravelly coarse sand, loamy sand, sand,	 GP-GM, SM, SP-SM, GM 	 A-1-b, A-3 	 0 	 0-15 	 45-100 	 40-95 	 20-70 	2-30	0-14	 NP
 	21-60	sand Stratified sand to very gravelly coarse sand	 SP-SM, SP, GP, GP-GM 	 A-2, A-3, A-1 	 0 	 0-15 	 45-100 	 40-95 	 15-65 	 0-15 	 0-14 	 NP
683A:		1	 	 	 	 	 	 	 			
Tipler	0-3	Sandy loam	SM	A-2, A-4	0	0-7	80-100	75-100	30-90	20-50	0-20	NP-4
	3-5	Sandy loam, gravelly fine sandy loam, loam	SM, SC-SM	A-2, A-4 	0 	0-7	55-100 	50-100 	30-95 	15-55	15-20 	NP - 4
	5-19	1	 SC-SM, SC, SM 	A-2, A-4 	0 	0-7 	 55-100 	50-100 	 45-95 	15-50	0-25	NP-8
 	19-26		CL-ML, SC-SM	 A-1, A-2, A-4 	0 	0-7 	 55-100 	 50-100 	 30-95 	15-50	0-30	 NP - 9
	26-33	fine sandy loam, gravelly sandy loam,	SC, SM	 A-1, A-2, A-4 	 0 	 0-7 	 55-100 	 50-100 	 30-95 	 15-50 	0-30	 NP - 9
 	33-60	loam Stratified sand to very gravelly coarse sand	 SP-SM, SP, GP-GM, GP 	 A-3, A-1, A-2 	 0 	 0-7 	 45-100 	 40-95 	 15-65 	 0-15 	 0-14 	 NP

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Fragi	nents		_	e passi	ng		
Map symbol	Depth	USDA texture					:	sieve n	umber		Liquid	
and					>10	3-10	ļ				limit	ticity
soil name		<u> </u>	Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
					!					!		ļ
706A:												
Winterfield	0-7	Very fine sandy	SM, SC-SM	A-4	0	0	100	95-100	85-100	45-60	0-25	NP-7
	E 60	loam									0.14	
	7-60	Sand, gravelly	•	A-1-b, A-2-4,	0	0	60-100	60-100	40-75	5-15	0-14	NP
		sand, gravelly loamy sand,	 	A-3	l I	l I	l I	 	l I	l I	1	
		loamy sand	 		l I	 	l I	 	l I	l I		
		Ioamy sand	 		i i	 	 	 	 	l I		
Totagatic	0-4	Fine sandy loam	SM. CL. ML.	A-4	0	l 0	100	100	70-85	40-55	0-30	NP-10
100494010			SC SC				200	200				
	4-8	Loamy fine	SM	A-2	0	0	100	100	50-80	20-35	0-23	NP-6
		sand, loamy	İ	j	i	İ	į	İ	į	į	İ	i
		sand, fine	İ	j	İ	İ	į	İ	į	j	İ	İ
İ		sand, sand	İ	İ	ĺ	ĺ	ĺ		ĺ	ĺ	İ	ĺ
	8-17	Fine sand,	SM	A-2	0	0	100	100	50-80	5-45	0-23	NP-6
		sand, loamy										
		sand, loamy										
		fine sand										
	17-28	Fine sand,	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-23	NP-6
		sand, loamy			!							
		sand, coarse								!		ļ
		sand, mucky										
	00.46	sand										
	28-46	1	SM	A-2, A-3	0	0	100	100	50-80	5-35	0-23	NP-6
		sand, loamy sand, coarse	l I		l I	 	 	 	 	l I		
		sand, coarse	 		 	 	 	 	 	l I	1	l I
		sand, mucky	 		i i	 	 	 	 	l I		
	46-70		SM	A-2, A-3	0	l 0	100	100	50-80	5-45	0-23	 NP-6
	10 70	sand, loamy		2, 5			200	200		3 23	0 20	
		sand, fine			i	! 	İ	! 	İ	İ		İ
		sand, loamy		i	i	İ	İ	İ	İ	İ	İ	İ
	sand, loamy		İ	į	i	İ	į	İ	į	İ	İ	İ
	70-80	Sand, coarse	SM	A-2, A-3	0	0	100	100	50-80	5-45	0-23	NP-6
		sand, fine										
		sand, loamy										
		sand, loamy										
		fine sand										

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	nents		rcentage	_	ng	 Liquid	 Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct 		 		 	Pct 	
724A:			İ	İ	İ	İ		İ	İ	İ	İ	İ
Rib	0-7	Silt loam	CL, CL-ML	A-4, A-6	0	0-7	95-100	90-100	90-100	85-100	20-30	4-11
	7-10	Silt loam	CL-ML	A-4	0	0-7	95-100	90-100	90-100	85-100	20-25	4-7
	10-32	Silt loam,	CL	A-6	0	0-7	95-100	90-100	90-100	85-100	30-40	10-20
		silty clay loam	 		 	 	 	 	 	 	 	
	32-35	Loam, gravelly loam, sandy loam	SM, ML, CL, SC 	A-1, A-2, A-4, A-6 	0 	0-7 	55-100 	45-100 	35-90 	20-75 	17-40 	1-20
	35-37	Gravelly loamy sand, loamy sand, loamy coarse sand, very gravelly loamy coarse sand	GP-GM, SP-SM, GM, SM -	A-1-b, A-3 	0 	0-7 	30-100 	25-100 	25-75 	5-30 	0-14 	NP
	37-60	Stratified sand to very gravelly coarse sand	SP, SP-SM, GP-GM, GP 	A-1, A-2, A-3 	0 	0-7 	45-100 	40-95 	 15-65 	0-15 	0-14 	NP
Rock outcrop.		i I	і І	 	j I	 	 	 	 	j I	j I	
726B:			ĺ	ĺ	ĺ			ĺ		ĺ	ĺ	ĺ
Sissabagama	0-10	Loamy sand	SC-SM, SM	A-2-4	0	0	90-100	80-100	55-80	15-25	0-20	NP-6
		Sand, loamy sand	SC-SM, SM 	A-2-4, A-3 	0 	0 	İ	80-100 	İ	5-20 	0-23 	İ
	31-45	Sand, loamy sand	SM 	A-2, A-3 	0 	0 	90-100 	80-100 	55-75 	5-20	0-20	NP - 6
	45-80	Stratified very fine sand to silt	CL-ML, CL, SC-SM	A-4 	0 	0 	95-100	90-100 	 90-100 	65-80 	 15-30 	2-12
733A:					! 	! 			! 	İ		
Wozny	0-3	Muck	PT	A-8	2-3	0	100	100	100	100		NP
	3-17	Silt loam	ML, CL-ML	A-4	0-5	0-7	80-100	75-100	70-100	65-90	17-26	2-7
	17-37	Silt loam	CL-ML, CL	A-4	0-5	0-7	80-100	75-100	70-100	65-90	20-29	4-10
	37-56	Stratified sandy loam to gravelly loam	SM, SC-SM 	A-1, A-2 	0-5 	0-7 	60-100 	50-90 	30-90 	15-70 	16-26 	1-7
	56-80	Loamy sand, gravelly loamy sand	SM, SC-SM 	A-1, A-2-4 	0-5 	0-7 	60-100 	 50-90 	 25-70 	 15-25 	0-23 	NP - 6

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	İ	ments		rcentag sieve n	_	-	Liquid	
and soil name	 	 	Unified	AASHTO	>10 inches	3-10	 4	10	40	200	limit	ticit; index
BOIL Hame	In	1			Pct	Pct	<u> </u>	1	10	200	Pct	
								ļ				
771A: Lenroot	 0-4	Loamy sand	SM, SC-SM	A-1, A-2	 0	 0	 0E 100	 75-100	 40 7E	120 20	1 0 20	 NP-10
Lenroot	0-4 4-8		SM, SC-SM	A-1, A-2	0 0	0		75-100 50-90		5-25		
	4-8	coarse sand,	SM, SP-SM	A-1, A-2	0	0	60-95	50-90	25-70	5-25	0-23	NP-6
	 	gravelly sand,	 	-	l I	 	 	 	l I	1		
	 	gravelly loamy	 		 	 	l I	 	I I		I	
	 	coarse sand	 		l I	 	 	 	 	1		1
	 8_14	Loamy coarse	SM, SP-SM	A-1, A-2, A-3	l l 0	0	 60-95	50-90	 25-70	5-25	0-23	ND-6
	0-14	sand, coarse	SM, SF-SM	A-1, A-2, A-3	1	0	00-33	30-30	23-70	3-23	0-23	MF - 0
	 	sand, coarse sand, gravelly	 		l I	 	 	 	 	1		1
	 	sand, graverry	 		l I	 	 	İ	i i	1	1	
	 	sand, loamy	 		l I	 	 	İ	i i	1	1	
	14-21	Gravelly coarse	SM. SP-SM	A-1, A-2, A-3	0	0	 60-95	50-90	25-65	2-15	0-19	NP-2
	 	sand, gravelly		,,	İ						0 20	
	! 	sand, sand		ì	i I	! 	 	i	i	i	i	i
	21-80	Stratified	SP-SM, SM	A-2, A-1, A-3	0	0	60-95	50-90	25-65	0-15	0-19	NP-2
	İ	coarse sand to			İ	i			i			i
	İ	gravelly		i	İ	i	İ	i	i	i	i	i
	İ	coarse sand		į	İ	i	İ	İ	İ	i	i	i
						į	ĺ	ĺ				
827A:												
Scoba			SC, SM	A-2-4, A-4	0 0					25-45		
	9-16	Sandy loam,	GM, SC, SM	A-1-b, A-2-4, A-4	0	0-9	55-100	50-100	35-80	20-45	0-26	NP-8
	 	loam, gravelly	 	A-4	 		 		 			
	 	fine sandy loam	l I	l i	 		 		 	1		
	1 16 20		SM, GM, SC	A-1-b, A-2-4,	l I 0	0-9	 EE 100	 EO 100	 25 75	15-40	110 20	 3-9
	16-20 	gravelly loam,	SM, GM, SC	A-4	0	0-9	33-100	120-100	35-75	15-40	10-20	3-9
	 	fine sandy	 	A-1	l I	 	 	 	l I			1
	 	loam	 		l I	 	 	 	 	1		1
	 20-26		GM, SC, SM	A-1-b, A-2-4,	l o	0-9	 55-100	 50-100	 35-75	15-40	18-28	3-9
	2 0-20	gravelly loam,	GM, BC, BM	A-4	i	0-5	33-100	30-100 	33-73	1	10-20	3-3
	 	fine sandy	 		l I	 	 	l I	i İ	1	i	i
	 	loam	! 		! 	 	 	i i	İ	ì		i
	26-31	Loamy sand,	GM, SM	A-1-a, A-2-4,	0	0-25	30-100	25-100	15-80	5-25	0-23	NP-6
		very gravelly		A-3								
		loamy coarse			İ	i	İ	i	İ	i	i	i
	İ	sand		i	İ	i	İ	i	İ	i	i	i
	31-60	Stratified sand	GP, GP-GM,	A-1, A-2, A-3	0	0-25	30-100	25-95	15-65	0-15	0-14	NP
	İ	to very	SP, SP-SM	' '	į	i	İ	i	İ	i í	İ	i
	İ	gravelly	· ·	i	İ	i	į	i	į	i	i	i
	İ	coarse sand		į	İ	i	į	i	į	i	İ	i
	i	i	İ	i	i	i	i	i	i	i	i	i

Table 23.--Engineering Index Properties--Continued

Map symbol and	Depth	USDA texture	Classi	fication	i	ments		rcentag sieve n	-	ng	 Liquid	
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
853C:			 				 	 	 			
Frogcreek	0 - 4	Silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	20-32	2-7
	4-13	Silt loam, silt	ML, CL-ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	18-28	2-7
	13-19	Sandy loam,	SC, SM	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-90	15-80	17-28	3-10
		loam, silt										
		loam, gravelly										
		sandy loam										
	19-32		SM, SC	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
ļ		loam, gravelly										
ļ		sandy loam										
	32-46	Gravelly sandy	SM, SC	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
ļ		loam, sandy								!		!
		loam, loam										
	46-80	Gravelly loamy		A-1, A-2-4	0-5	0-7	60-100	50-90	25-70	10-25	0-23	NP-6
		sand, loamy	SC-SM									
		sand	 			 -	 	 	 			
Stinnett	0 - 4	Silt loam	 ML, CL-ML	 A-4	0-2	0-5	 90-100	 85-100	 80-100	 70-90	20-32	2-7
į	4-7	Silt loam, silt	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
1	7-18	Silt loam, silt	ML, CL-ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
1	18-29	Silt loam	CL-ML, CL	A-4	0-2	0-5	90-100	85-100	80-100	70-90	18-29	4-11
	29-34	Loam, sandy	SM, SC	A-1-b, A-2-4,	0-5	0-7	60-100	50-90	30-90	15-70	17-28	3-10
		loam, gravelly		A-4								
		sandy loam										
	34-41	Sandy loam,	SM, SC	A-1-b, A-2-4,	0-5	0-7	60-100	50-90	30-90	15-70	18-30	3-12
		loam, gravelly		A-4								
ļ		sandy loam										
	41-55		SC-SM, SM	A-1, A-2-4	0-5	0-7	60-100	50-90	25-70	15-25	0-23	NP-6
ļ		gravelly loamy								!		!
		sand										
	55-80		SC-SM, SM	A-1, A-2-4	0-5	0-7	60-100	50-90	25-70	15-25	0-23	NP-6
		gravelly loamy	 			 -	 	 	 			
		sand	l I		 	 	 	 	 			
Wozny	0-3	Muck	 PT	 A-8	2-3	 0	100	100	100	100		 NP
i	3-17	Silt loam	CL-ML, ML	A-4	0-5	0-7	80-100	75-100	70-100	65-90	17-26	2-7
į	17-37	Silt loam	CL, CL-ML	A-4	0-5	0-7	80-100	75-100	70-100	65-90	20-29	4-10
į	37-56	Stratified	SC-SM, SM	A-1, A-2	0-5	0-7	60-100	50-90	30-90	15-70	16-26	1-7
į		sandy loam to			[[
į		gravelly loam										
į	56-80	Loamy sand,	SC-SM, SM	A-1, A-2-4	0-5	0-7	60-100	50-90	25-70	15-25	0-23	NP-6
1		gravelly loamy										
1		sand										

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	fication	Fragi	ments		_	e passi: umber	ng	 Liquid	 Plas
and					>10	3-10	i				limit	
soil name		İ	Unified	AASHTO	inches	inches	4	10	40	200	İ	index
	In			İ	Pct	Pct					Pct	
856B:						 	 	 	 	 	 	
Stinnett	0 - 4	Silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	20-32	2-7
	4 - 7	Silt loam, silt	ML, CL-ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
	7-18	Silt, silt loam	ML, CL-ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
	18-29	Silt loam	CL-ML, CL	A-4	0-2	0-5	90-100	85-100	80-100	70-90	18-29	4-11
	29-34	Loam, sandy loam, gravelly sandy loam	SM, SC 	A-1-b, A-2-4, A-4	0-5 	0-7 	60-100 	50-90 	30-90 	15-70 	17-28 	3-10
	34-41	Sandy loam, loam, gravelly sandy loam	SM, SC	A-1-b, A-2-4, A-4	0-5	0-7 	60-100 	50-90 	30-90 	 15-70 	18-30 	3-12
	41-55	Loamy sand, gravelly loamy sand	SM, SC-SM 	A-1, A-2-4	0-5	0-7 	60-100 	 50-90 	25-70 	15-25 	0-23	NP - 6
	55-80	Loamy sand, gravelly loamy sand	SM, SC-SM	A-1, A-2-4	0-5	0-7	60-100 	50-90	25-70	15-25 	0-23	NP - 6
857B:										[
Frogcreek	0 - 4	· ·	ML, CL-ML	A-4	0-2				80-100		,	2-7
		Silt loam, silt	CL-ML, ML	A-4	0-2				80-100		1	2-7
	13-19	Silt loam, loam, sandy loam, gravelly sandy loam	j	A-1-b, A-2-4 	0-5 	0-7 	 	 	30-90 	 		3-10
	19-32	Sandy loam, loam, gravelly sandy loam	SC, SM 	A-1-b, A-2-4 	0-5 	0-7 	60-100 	50-90 	30-80 	15-65 	18-30 	3-12
	32-46	Gravelly sandy loam, sandy loam, loam	SC, SM 	A-1-b, A-2-4	0-5	0-7	60-100 	50-90 	30-80	15-65 	18-30 	3-12
	46-80	Gravelly loamy sand, loamy sand	SM, SP-SM,	A-1, A-2-4	0-5	0-7 	60-100 	50-90 	25-70 	10-25 	0-23	NP - 6

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments	Pe	rcentag	e passi	ng		
Map symbol	Depth	USDA texture			l		:	sieve n	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
					ļ							
857C:		1-1										
Frogcreek		Silt loam	CL-ML, ML	A-4	0-2	1		85-100			1	2-7
		Silt loam, silt	•	A-4	0-2	1		85-100			1	2-7
	13-19	Silt loam,	SC, SM	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-90	15-80	17-28	3-10
ļ		loam, sandy										
		loam, gravelly										
		sandy loam										
	19-32	Sandy loam,	SC, SM	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
ļ		loam, gravelly										
		sandy loam										
	32-46	Gravelly sandy	SC, SM	A-1-b, A-2-4	0-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
		loam, sandy		!	!			!		!	!	
		loam, loam		!	!			!		!	!	
	46-80	Gravelly loamy		A-1, A-2-4	0-5	0-7	60-100	50-90	25-70	10-25	0-23	NP-6
		sand, loamy	SC-SM									
		sand										
873B:												
Stanberry	0-1	Highly	PT	A-8	0-5	0-7	100	100				
		decomposed										
		plant material										
	1-3	Sandy loam,	CL-ML, ML,	A-2-4, A-4	0-5	0 - 7	90-100	85-100	55-95	25-75	17-28	2-7
		loam, fine	SC-SM, SM									
		sandy loam										
	3-19	Sandy loam,	SC-SM, ML,	A-2-4, A-4	0-5	0-7	90-100	70-100	55-95	25-75	18-30	3-9
		loam, gravelly	CL-ML, SM									
		fine sandy										
		loam										
	19-24	Sandy loam,	SM, SC-SM	A-2-4, A-4	0-5	0-7	75-100	70-100	40-70	20-40	18-28	3-10
		gravelly sandy										
		loam										
	24-32	Sandy loam,	SC-SM	A-2-4, A-4	0-5	0-7	75-100	70-100	40-70	20-40	19-29	5-11
		gravelly sandy										
		loam										
	32-42	Loamy sand,	SM, SC-SM	A-1-b, A-2-4	0-5	0-7	75-100	70-100	35-75	15-30	16-23	2-6
		gravelly loamy										
		sand										
	42-80	Loamy sand,	SM, SC-SM,	A-1-b, A-2-4	0-5	0-7	60-95	55-90	30-75	10-25	0-23	NP-6
		gravelly loamy	GM, GC-GM									
		sand										
İ												

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	i	agments	_i	ercentag sieve n	_	_	 Liquid	
and					>10		·	1		1	limit	ticity
soil name	In	1	Unified	AASHTO	inch Pct	es inche	es 4	10	40	200	Pct	index
	111	 	 	l İ	PCL	PCL	l I		l	I I	PCL	1
873C:		İ		İ	i	i	j	i	i	i		į
Stanberry	0-1	Highly decomposed	PT 	A-8	0-5	0-7	100	100				
	1-3	plant material Sandy loam, loam, fine sandy loam	SC-SM, ML,	 A-2-4, A-4 	4 0-5 	0-7	90-100	 85-100 	 55-95 	25-75	 17-28 	 2-7
	3-19	sandy loam Sandy loam, loam, gravelly fine sandy	CL-ML, ML, SC-SM, SM	 A-2-4, A-4 	4 0-5 	0-7	 90-100 	 70-100 	 55-95 	25-75	 18-30 	 3-9
	19-24	loam Sandy loam, gravelly sandy	 SC-SM, SM 	 A-2-4, A-4	1 0-5 	0-7	 75-100	 70-100 	40-70	20-40	 18-28 	 3-10
	24-32	loam Sandy loam, gravelly sandy loam	 SC-SM 	 A-2-4, A-4 	1 0-5 	0-7	 75-100 	 70-100 	 40-70 	20-40	 19-29 	 5-11
	32-42	Loamy sand, gravelly loamy sand	SM, SC-SM	 A-1-b, A-2 	2-4 0-5 	0-7	75-100	70-100	 35-75 	15-30	16-23	2-6
	42-80	Loamy sand, gravelly loamy sand	GC-GM, GM, SC-SM, SM	A-1-b, A-2 	2-4 0-5 	0-7	60-95	55-90	30-75	10-25	0-23	NP - 6
873D:				 	l I	l	ļ			l I		
Stanberry	0-1	Highly decomposed	 PT 	A-8 	0-5	0-7	100	100				
	1-3	plant material Sandy loam, loam, fine sandy loam	 SC-SM, CL-ML, ML, SM 	 A-2-4, A-4 	4 0-5 	0-7	 90-100 	 85-100 	 55-95 	 25-75 	 17-28 	 2-7
	3-19	Sandy loam, loam, gravelly fine sandy loam	SM, SC-SM, ML, CL-ML	A-2-4, A-4 	4 0-5 	0-7	90-100	70-100	55-95 	25-75	18-30	3-9
	19-24	1	SM, SC-SM	A-2-4, A-4	4 0-5 	0-7	75-100	70-100	40-70	20-40	18-28	3-10
	24-32	Sandy loam, gravelly sandy loam	SC-SM	A-2-4, A-4	4 0-5 	0-7	75-100	70-100	40-70	20-40	19-29	5-11
	32-42	Loamy sand, gravelly loamy sand	SM, SC-SM	A-1-b, A-2 	2-4 0-5 	0-7	75-100	70-100	35-75 	15-30	16-23	2-6
	42-80	Loamy sand, gravelly loamy sand	SM, SC-SM, GM, GC-GM	 A-1-b, A-2 	2-4 0-5 	0-7	60-95	 55-90 	30-75	10-25	0-23	NP - 6

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments		rcentag	_	ng		
Map symbol	Depth	USDA texture			_			sieve n	umber		Liquid	
and			Unified	3.3.01100	>10	3-10 inches		1.0	40	1 200	limit	
soil name			Unified	AASHTO		<u> </u>	4	10	40	200	1	index
	In				Pct	Pct					Pct	
905A:												
Cublake	 0-3	Loamy sand	 SM	 A-2	0	 0	 00_100	 75-100	 50-75	20-30	0-20	 NP
Cubiake	3-4	Loamy sand,	SM	A-2-4	0	0		75-100	1	1	0-20	
	J- 1	sand, loamy	514	1 - 2 - 3			00-100 	75-100	30-00	20-33	0-20	142 - 2
		fine sand	 			 	 	 		i i		i i
	4-23	1	SM	A-2-4	0	0	 80-100	75-100	50-80	20-35	0-20	 NP-4
		sand, loamy			i						0 20	
	 	fine sand	 		i	 	 	İ	i	İ		
	23-32		SM	A-3	0	0	80-100	75-100	50-70	5-15	0-14	NP
		sand, loamy			i							i
	i	sand			i	i	İ	i	i	i	i	i
	32-40	Sand, fine sand	SM	A-3	i o	0	80-100	75-100	50-70	5-15	0-14	NP
	40-48	Fine sand, sand	SM	A-3	j o	0		75-100			0-19	NP-2
	48-60	Stratified very	SC-SM, CL,	A-4, A-6	j o	0	95-100	90-100	75-100	55-75	20-35	4-15
	İ	fine sandy	CL-ML	j	İ	į	į	į	İ	İ	İ	į
		loam to silt		İ	ĺ	İ	ĺ	İ	İ	İ	İ	ĺ
		loam		İ	İ	İ	ĺ	İ	İ	İ	İ	ĺ
				j	į	İ	ĺ	İ	İ	İ	İ	ĺ
926A:												
Flink	0-3	Loamy sand	SM	A-2	0	0	90-100	85-100	60-75	20-30	0-16	NP
	3-6	Sand, loamy	SM	A-3	0	0	90-100	85-100	55-70	5-15	0-14	NP
		sand, loamy										
		fine sand										
	6-9	Sand, loamy	SM	A-3	0	0	90-100	85-100	55-70	5-15	0-14	NP
		sand, loamy										
		fine sand										
	9-26	Sand, loamy	SM	A-3	0	0	90-100	85-100	55-70	5-15	0-14	NP
		sand, loamy							!			!
		fine sand			!			!	!			!
		Sand, fine sand	1	A-3	0	0		85-100	1	5-15	0-14	NP
		Sand, fine sand		A-3	0	0		85-100	1	5-15	0-14	NP
	46-52	Stratified silt	'	A-4, A-6	0	0	90-100	85-100	80-100	80-95	20-44	6-25
		to silty clay	SC-SM						1			
		loam	 GT NT GT				00 100	05 100			116 44	2 25
	5∠-80	Stratified silt	'	A-4, A-6	0	0	 AO-TOO	85-100	/5-95	35-85	15-44	2-25
		to silty clay	SC, SC-SM				I I	1	1	1		I I
	 		 			 	I I	1	1	1		I I
	 	very fine sand	 			 	I I	1	1	1		I I
			1		1							

Classification Fragments Percentage passing |Liquid| Plas-Map symbol Depth USDA texture sieve number -and >10 3-10 limit | ticity soil name Unified AASHTO 200 index |inches|inches| 4 10 40 In Pct Pct Pct 943D: Stanberry-----0-1 Highly PT A-8 0-5 0-7 100 100 decomposed plant material Sandy loam, CL-ML, ML, A-2-4, A-4 0-5 0-7 |90-100|85-100|55-95 |25-75 |17-28 | 2-7 SC-SM, SM loam, fine sandy loam 3-19 | Sandy loam, |90-100|70-100|55-95 |25-75 |18-30 | 3-9 SM, ML, A-2-4, A-4 0-5 loam, gravelly CL-ML, SC-SM fine sandy loam 19-24 | Sandy loam, SM, SC-SM A-2-4, A-4 75-100 70-100 40-70 20-40 18-28 0-5 3-10 gravelly sandy loam 24-32 | Sandy loam, SC-SM A-2-4, A-4 75-100 70-100 40-70 20-40 19-29 5-11 0-5 gravelly sandy loam SC-SM, SM |75-100|70-100|35-75 |15-30 |16-23 | 2-6 32-42 Loamy sand, |A-1-b, A-2-4 | 0-5 0-7 gravelly loamy sand 42-80 | Loamy sand, SM, GM, |A-1-b, A-2-4 | 0-5 |60-95 |55-90 |30-75 |10-25 0-23 NP-6 gravelly loamy | SC-SM, GC-GM sand PT Greenwood----- 0-6 Peat A-8 0 0 100 100 ------------

A-8

0

0

100

100

6-60 | Mucky peat

PT

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classi	fication	Frag	ments		_	e passi: umber	ng	 Liquid	 Dlag-
and	Depth	USDA CEACUIE		1		3-10		sieve n	miner		limit	
soil name			Unified	AASHTO		3-10 inches	4	10	40	200	1111111	index
SOII Halle		1	Unitied	AASHIO		<u> </u>	4	1 10	1 40	1 200	 	Index
	In				Pct	Pct					Pct	
948A:					l I	 	 	 		 		
Billyboy	0-4	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	90-100	70-100	65-85	20-25	3-10
	4-11	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	90-100	70-100	65-85	15-25	NP-10
	11-20	Silt loam	CL-ML, ML	A-4	0	0-7	95-100	90-100	70-100	65-85	15-25	NP-10
	20-26	Loam, gravelly	ML, SC, CL,	A-1-b, A-2,	0	0-7	60-100	55-100	30-90	20-75	15-25	NP-10
		sandy loam,	SM	A-4								
		very gravelly										
		fine sandy										
		loam										
	26-30	Sandy loam,	CL, SM, SC,	A-1-b, A-2,	0	0-7	60-100	55-100	30-90	20-75	15-25	3-10
		gravelly loam,	ML	A-4								
		very gravelly										
		fine sandy										
		loam										
	30-35	1	SM, GM	A-1-a, A-2,	0	0-7	45-100	40-95	15-75	5-25	15-20	NP-5
		gravelly loamy		A-3								
		coarse sand,										
		very gravelly										
		loamy sand,		!	!		!					
		extremely		!	!		!	!				!
		gravelly					!		ļ			!
		coarse sand										!
	35-60	Stratified sand	1	A-1, A-2, A-3	0	0-7	45-100	40-95	15-65	0-15	0-14	NP
		to very	GP-GM, GP				!		ļ			
		gravelly					!		ļ			
		coarse sand			[!	!		ļ.	!		!

Table 23.--Engineering Index Properties--Continued

		TIGDA . L	Classif	ication	Frag	ments		rcentag	_	-		
Map symbol and	Depth	USDA texture		I	_	3-10		sieve n	umber	•	Liquid limit	1
and soil name			Unified	AASHTO	>10	3-10 inches	4	10	40	200	limit	index
soll name		1	Unified	AASHTO		<u> </u>	4	1 10	1 40	200	<u> </u>	Index
	In				Pct	Pct					Pct	
970C:												
Keweenaw	0-2		SC, SM, SC-SM	•	0-2			75-100				NP-10
	2-4		SC, SC-SM, SM		0	0-50	85-100	65-100	45-75	15-35	17-28	2-10
		cobbly loamy		A-2-4								
		sand, loamy										
		sand, gravelly loamy fine	 	l I								
		sand	ļ Ī	l i								
	 1_16		SM, SC-SM, SC	 ⊼_2 ⊼_1_b	0	0-25	 05_100	 65-100	 45-75	15-25	16-27	2-10
	1 4-10	cobbly loamy	am, ac-am, ac	A-2-4	0	0-23	102-100	102-100	1 43-73	122-33	10-27	2-10
		fine sand,	 	A-2-4 	-	 		 	 	ì		i
		loamy sand,	! 	l I	-	 	i	i i	i İ	ì	i	i
		gravelly loamy	İ	İ			i	İ	i	1		i
		sand	i	İ	i	<u> </u>	i	i	i	i		i
	16-20	Loamy sand,	SC-SM, SP-SM,	A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SM, SC	İ	i	i	i	i	İ	i	i	i
	İ	fine sand,	İ	İ	j	į	i	i	İ	i	i	i
	İ	gravelly loamy	İ	İ	j	į	i	i	İ	i	i	i
	İ	sand, sand	İ	İ	j	į	į	į	İ	Ì	İ	İ
	20-27	Loamy sand,	SC, SC-SM,	A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-23	NP-10
		cobbly sand,	SM, SP-SM	A-2-4								
		gravelly loamy										
		fine sand										
	27-43		SP-SM, SM,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80	5-20	0-27	NP-10
		loamy sand,	SC-SM, SC	A-2, A-2-4								
		gravelly loamy										
		fine sand,	!	!			!			!		!
		sandy loam										
	43-75		SC, SC-SM, SM		0	0-25	85-100	65-100	45-80	10-30	0-30	NP-10
		sandy loam,		A-2-4								!
		gravelly loamy										
		fine sand,	 	l I								
	 	fine sandy loam	 	 	I I	 	1	1	 	I	1	1
	 75-80	1	SM, SP-SM,	 A-1-b, A-2,	0	0-25	 85-100	65-100	 45.75	10-25	1 0-20	 NP-10
	1 13-00	gravelly loamy		A-1-D, A-2,	0	0-25	 02-T00	 02-T00	1 42-13	1 10-23	0-20	 WE - TO
	l I	sand, cobbly	DC-DM, DC	A-2-4 	1	I 		1		1	1	1
ļ	l I	sand, cobbiy	 	 	1	I 		1		1	1	1
	 	Janu	I I	I I		 		1		I I	1	1

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Frag	ments		rcentag	_	-		
Map symbol	Depth	USDA texture						sieve n	umber	•	Liquid	
and					>10	3-10	ļ				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct					Pct	
970C:	 		 	 		 	 	l İ		l l		
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
	3-8	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
	 	loam, fine sandy loam, loamy sand	 		i I I	 	i 	 	 	İ I I	 	i
	8-15	Gravelly sandy	SM, SC-SM	A-1-b, A-2-4,	0	0-15	55-100	50-100	30-95	15-55	0-25	NP-7
	 	loam, loam,	 	A-4			 	 	 	l I		
	į	fine sandy	į	j	į	į	į	į	j	į	j	į
		loam										
	15-21	Gravelly coarse	GM, GP-GM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70	2-30	0-14	NP
	 	sand, loamy sand,	SP-SM, SM		 	 	 	 				
	 	loamy fine sand				 	 	 	 			
	21-60	1		A-1, A-2, A-3	0	0-15	45-100	40-95	15-65	0-15	0-14	NP
	 	to very gravelly	SP, SP-SM		 	 		l I				
		coarse sand							į			
Greenwood	 0-6	Peat	 PT	 A-8	0	 0	 	 				
	6-60	Mucky peat	PT	A-8	0	0		i		j		
	İ		į	j	į	į	į	į	j	į	j	į

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments	Pe	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture	<u> </u>		_			sieve n	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	!	ļ.		Pct	Pct	!	[!		Pct	
970E:				 								
Keweenaw	 0-2	Sandy loam	SC, SC-SM, SM	 a	0-2	1 0 20	 00 100	 75-100	 EE 00	120 40	0 20	 NP-10
Keweenaw	2-4	Gravelly loamy			0-2			65-100				2-10
	4-4	fine sand,	bc, bc-bm, bm	A-2-4		0-30	03-100 	03-100	45-75	1	17-20	2-10
		cobbly loamy	i	 					i	i		İ
		sand, loamy	i		i	i	i	<u> </u>	i	i		i
		sand, sandy	i	<u> </u>	i	i	İ	i	i	i	i	İ
	İ	loam	İ	İ	i	İ	i	į	i	i	İ	i
	4-16	Loamy sand,	SC-SM, SM, SC	A-2, A-1-b,	0	0-25	85-100	65-100	45-75	15-35	16-27	2-10
		sandy loam,		A-2-4								
		gravelly loamy										
		sand, cobbly										
		loamy fine										
		sand	!			!	!		!			
	16-20		'	A-2, A-1-b	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		cobbly loamy	SC-SM, SC						!			
		fine sand,								1		
		gravelly loamy sand	 	l I								
	 20-27	1	SP-SM, SM,	 A-1-b, A-2,	0	 0-25	 05_100	 65_100	 45-75	10-25	0-23	 ND_10
	20-27	cobbly sand,	SC-SM, SC	A-2-4	0	0-23	183-100	103-100	43-73	10-23	0-23	NF-10
	 	gravelly loamy		14-2-4	-		l I	 	i	I I	i i	l I
		fine sand	i	! 		i			i	i		i
	27-43	1	SP-SM, SM,	A-3, A-1-b,	0	0-25	85-100	65-100	40-80	5-20	0-27	NP-10
		loamy sand,	SC-SM, SC	A-2, A-2-4	i	i	İ	i	i	i	i	İ
	İ	gravelly loamy	İ	İ	i	İ	i	į	i	i	İ	i
	İ	fine sand,	İ		į	į	İ	į	į	j	j	į
		sandy loam										
	43-75	Loamy sand,	SC-SM, SC, SM	A-1-b, A-2,	0	0-25	85-100	65-100	45-80	10-30	0-30	NP-10
		sandy loam,		A-2-4								
		fine sandy										
		loam, gravelly										
		loamy fine	ļ		- !	!	ļ	!	!	ļ		!
		sand										
	75-80			A-1-b, A-2,	0	0-25	85-100	65-100	45-75	10-25	0-20	NP-10
		gravelly loamy	SM, SP-SM	A-2-4						1		
	l	sand, cobbly sand	1	 	1		 			1		1
		sand			!	!	1		!	1	1	

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	İ	ments		rcentag sieve n	_	_	Liquid	
and					>10	3-10				1	limit	ticity
soil name	<u> </u>	<u> </u>	Unified	AASHTO		inches	4	10	40	200	1	index
	In	1	l I	 	Pct	Pct		 			Pct	
970E:	 		 	 	 	 	 	l I	l I			l I
Pence	0-3	Sandy loam	SM	A-4	0	0-15	80-100	75-100	50-85	20-50	0-21	NP-4
	3-8	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	80-100	75-100	45-95	15-55	0-25	NP-7
		loam, fine										
		sandy loam,						[
		loamy sand										
	8-15	Gravelly sandy loam, sandy	SM, SC-SM	A-1-b, A-2-4, A-4	0	0-15	55-100	50-100	30-95	15-55	0-25	NP - 7
		loam, loam,	 	A-1	 	 	 	l I	l I			
		fine sandy		 		<u> </u>	i	i		i		İ
		loam	İ			i	i	İ	İ	i	İ	İ
	15-21	Gravelly coarse	GM, GP-GM,	A-1-b, A-3	0	0-15	45-100	40-95	20-70	2-30	0-14	NP
		sand, loamy	SP-SM, SM					[
		sand, sand,										
	 	loamy fine sand	 	 	 	 	 	l I	l I	l I		
	 21-60	Stratified sand	SP-SM. SP.	 A-1, A-2, A-3	 0	0-15	 45-100	 40-95	15-65	0-15	0-14	 NP
		to very	GP-GM, GP		İ							i
	İ	gravelly	j	İ	İ	į	į	į	j	į	j	į
		coarse sand	[[!	!				ļ
Greenwood	 0-6	Peat	 PT	 A-8	 0	 0	 	 	 			
Greenwood	6-60	Mucky peat	PT	A-8	0 0	0						
							i	i	i	i		İ
1070C:	i	İ	İ			į	i	i	İ	i	İ	İ
Fremstadt	0-5	Sandy loam	SM, SC-SM	A-2	0-3	0-15	75-100	70-95	40-60	25-35	18-31	2-10
	5-33		SC-SM, SM	A-2, A-1-b	0-3	0-15	75-100	70-95	30-75	15-30	0-24	NP-6
	22 25	sand								110.40	116.00	
	33-3 <i>1</i> 	Sandy loam, loamy sand,	SC, SC-SM, SM	A-1-D, A-2 	0-3	0-15	70-100	65-95	30-60	10-40	16-27	2-10
	 	gravelly loamy	 		 	 	i	 	l	İ		
		sand	<u> </u>	<u> </u>		i	i	İ	İ	İ		İ
	37-45	Loamy sand,	SC, SC-SM, SM	A-1-b, A-2	0-3	0-15	70-100	65-95	30-60	10-40	0-27	NP-10
		sandy loam,										
		gravelly loamy					!	!	ļ	ļ		
		sand								110.00		
	45-/0 	Loamy sand, gravelly loamy		A-1-b, A-2	0-3	0-15	70-100	05-95 	30-50	10-30	0-23	MP-6
		sand	 	 	 	 	 	l I	l I			
	70-80		SC-SM, SM	 A-1-b, A-2	0-3	0-15	70-100	65-95	30-50	10-30	0-23	NP-6
		gravelly loamy		İ	İ	į	į	į	į	j	j	į
		sand										

Table 23.--Engineering Index Properties--Continued

Map symbol	 Depth	USDA texture	Classif	ication	Fragi	ments		rcentago sieve n	_	-	Liquid	 Plas-
and				<u> </u>	>10	3-10	i				limit	
soil name	i		Unified	AASHTO	inches	inches	4	10	40	200		index
	In		1		Pct	Pct	İ			İ	Pct	İ
			ļ					ļ	ļ			
1070C:	!						!					!
Cress	0-3	Sandy loam	1 -	A-2-4, A-4	0	0-5		80-100			0-28	
	3-15	Sandy loam,	SC, SM	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP - 9
		fine sandy loam										
	15 21		an an an	 A-3	 0	 0-5	 55-100			0-30	0-21	
	15-31	Loamy sand,	SP-SM, SM	A-3	0	0-5	55-100	50-95	20-75	0-30	0-21	NP-4
		gravelly sand,		 	 			l I	l I			
	 	very gravelly	1	 	 	 	 	 	l I			I I
		loamy sand		 	 	 		l I	l I			i i
	31-36	Gravelly loamy	SP-SM. SM	 A-3	 0	0-5	 55-100	 50-100	 20-75	0-30	0-21	 NP-4
	31 30	sand, coarse		1	• 	0 3	33 100	50 100	1 20 75	0 30	0 21	
	i	sand, gravelly		! 	 		i	! 	! 	i		
	i	sand, very		 	! 	<u> </u>	i	İ	i i	i		i
	i	gravelly loamy	İ			i	i	İ	İ	i	i	İ
	i	sand	İ	İ	İ	į	İ	į	j	i	İ	į
	36-60	Stratified sand	SP, GP,	A-1, A-2, A-3	0	0-5	30-100	25-95	15-65	0-15	0-14	NP
	İ	to very	GP-GM, SP-SM			İ	İ	ĺ	ĺ	İ	İ	ĺ
		gravelly										
		coarse sand										
1070D:	 		 	 	 	 	 	 	 			
Fremstadt	0-5	Sandy loam	SM, SC-SM	A-2	0-3	0-15	75-100	70-95	40-60	25-35	18-31	2-10
	5-33	Loamy sand,	1 -	A-2, A-1-b	0-3					15-30		
	i	sand	İ	İ	İ	į	İ	į	j	i	İ	į
	33-37	Sandy loam,	SC-SM, SC, SM	A-1-b, A-2	0-3	0-15	70-100	65-95	30-60	10-40	16-27	2-10
		loamy sand,										
		gravelly loamy										
		sand										
	37-45	Loamy sand,	SC, SC-SM, SM	A-1-b, A-2	0-3	0-15	70-100	65-95	30-60	10-40	0-27	NP-10
		sandy loam,										
		gravelly loamy										
	!	sand					!					
	45-70	Loamy sand,		A-1-b, A-2	0-3	0-15	70-100	65-95	30-50	10-30	0-23	NP-6
		gravelly loamy										
		sand										
	70-80	Loamy sand,	SC-SM, SM	A-1-b, A-2	0-3	0-15	70-100	65-95	30-50	10-30	0-23	NP-6
		gravelly loamy] I	 			l I	 			
	1	sand] I	 		1	 	 			
	1	1		I	I	1	1	1	1	1	1	1

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Fragi	ments	Pe:	rcentag	e passi	ng		
Map symbol	Depth	USDA texture					:	sieve n	umber		Liquid	Plas-
and					>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In		1		Pct	Pct					Pct	
1070D:				 	 	 	 					
Cress	0-3	Sandy loam	SC, SM	 A-2-4, A-4	 0	0-5	 0E 100	 00 100	 EE 00	25-45	0-28	INTO O
Cless		Sandy loam,	SC, SM	A-2-4, A-4	0 0	0-5		80-100			0-28	
	3-13	fine sandy	BC, BM	A-2-1, A-1 	0	0-3	1 83-100	180-100	122-80	23-43	0-28	NF - 3
		loam		 	l I	 	l I	 				l I
	15_31	Loamy sand,	SM, SP-SM	 A-3	l l 0	0-5	 55_100	 50-95	 20-75	0-30	0-21	 NTD _ 4
	13-31	coarse sand,	DM, DF-DM	n-3	0	U-3 	33-100 	30-33	20-75	0-30	0-21	141 - 1
		gravelly sand,		 	! 	 	 	İ	i	1		
		very gravelly		! 	! 	 	! 		i	1		!
		loamy sand		 	İ	<u> </u>	! 	i	i	i		!
	31-36	Gravelly loamy	SM, SP-SM	A-3	0	0-5	55-100	50-100	20-75	0-30	0-21	NP-4
		sand, coarse	i		İ	İ	İ	İ	i	i	i	İ
		sand, gravelly	İ	İ	j	İ	İ	İ	İ	İ	į	İ
		sand, very	İ	İ	j	İ	İ	İ	İ	İ	İ	İ
		gravelly loamy			ĺ	ĺ	ĺ	ĺ	İ	İ	İ	ĺ
		sand										
	36-60	Stratified sand	SP-SM, GP,	A-1, A-2, A-3	0	0-5	30-100	25-95	15-65	0-15	0-14	NP
		to very	GP-GM, SP									
		gravelly										
		coarse sand										
1080B:			İ	 	 	 	 	 				
Spoonerhill	0-3	Sandy loam	SM, SC-SM, SC	 A-2. A-4	0	0-15	 85-100	80-95	 55-75	25-40	0-31	 NP-10
500000000000000000000000000000000000000	3-12	Gravelly sandy	•	'	0	!		50-95	1		0-28	
		loam, loamy		A-4	İ			İ	i			
		sand, gravelly	İ	İ	İ	İ	İ	i	i	i	i	İ
		loamy sand	İ	İ	j	İ	į	İ	İ	İ	İ	į
	12-16	Gravelly loamy	SP-SM, SM,	A-1-b, A-2	0	0-15	60-100	50-95	35-75	10-30	0-27	NP-10
		sand, loamy	SC-SM, SC									
		sand, sandy										
		loam										
	16-34		SC-SM, SP-SM,	A-1-b, A-2	0	0-15	60-100	50-95	35-75	10-25	0-23	NP-6
		sand, gravelly	SM									
		loamy sand										
	34-46	Sand, loamy	SP-SM, SM,	A-1-b, A-2	0	0-15	60-100	50-95	35-75	10-25	0-23	NP-6
		sand, gravelly	SC-SM					[-		
	46.00	loamy sand								110.05		
	46-80	Gravelly loamy	1	A-1-b, A-2	0	0-15	 00-T00	50-95	35-75	10-25	0-23	NP-6
		sand, loamy	SM] I	l I	 	 	[[I			
		sand, sand] I	 	 	l I	 				l I
		1	1	l	I	I	l		1	1		l

Map symbol	Depth		Classification		İ	ments		rcentage sieve n	-	_	Liquid	
and soil name		 	 Unified	 AASHTO	>10 inches	3-10 inches	 4	10	40	200	limit 	ticity index
	In	 			Pct	Pct	 		 	 	Pct	
1080B: Spoonerhill,		 	 	 	 	 	 	 	 	 		
stony	0-3 3-12	Sandy loam Gravelly sandy loam, loamy sand, gravelly loamy sand	İ	'	0-2		85-100 60-100 				1	NP-10 NP-10
	12-16	Gravelly loamy sand, loamy sand, sandy loam	SP-SM, SM, SC-SM, SC	A-1-b, A-2 	0 	0-15 	 60-100 	50-95 	35-75 	10-30 	0-20	 NP-10
	16-34	Loamy sand, sand, gravelly loamy sand		 A-1-b, A-2 	 0 	 0-15 	 60-100 	 50-95 	 35-75 	 10-25 	0-20	 NP-10
	34-46	-		 A-1-b, A-2 	0 	0-15 	 60-100 	50-95	 35-75 	 10-25 	0-20	 NP-10
	46-80	Gravelly loamy sand, loamy sand, sand	SC, SC-SM, SM, SP-SM	A-1-b, A-2 	0 	0-15 	60-100 	50-95 	 35-75 	10-25 	0-20	NP-10
Cress	0-3	Sandy loam	SC, SM	A-2-4, A-4	0	0-5	85-100	80-100	55-80	25-45	0-28	NP-9
	3-15	Sandy loam, fine sandy loam	SC, SM	A-2-4, A-4 	0 	0-5 	 85-100 	80-100 	 55-80 	25-45	0-28	NP - 9
	15-31	Loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	SM, SP-SM	A-3 	0 	0-5	55-100 	50-95	20-75	0-30	0-21	NP - 4
	31-36	Gravelly loamy sand, coarse sand, gravelly sand, very gravelly loamy sand	 	A-3 	0 	0-5	55-100 	50-100 	20-75 	0-30	0-21	NP - 4
	36-60	Sand Stratified sand to very gravelly coarse sand	 SP, GP-GM, GP, SP-SM 	 A-1, A-2, A-3 	 0 	0-5	 30-100 	 25-95 	 15-65 	 0-15 	0-14 	 NP

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classif	ication	Fragi	nents		rcentage	_	ng	 Liquid	 Plas-
and	Depth	ODDA CERCUIE	l 	1	>10	3-10	! !	sieve iii	miner			ticity
soil name			Unified	AASHTO	1	inches	4	10	40	200		index
	In				Pct	Pct				İ	Pct	
1653C:		 		 	 		 		 			
Stanberry	0-1	Highly decomposed plant material	PT 	A-8 	0-5	0-7 	100 	100 	 			
	1-3	Sandy loam, loam, fine sandy loam	CL-ML, ML, SC-SM, SM	 A-2-4, A-4 	 0-5 	 0-7 	 90-100 	 85-100 	 55-95 	25-75	 17-28 	 2-7
	3-19	Sandy loam, loam, gravelly fine sandy loam	CL-ML, ML, SC-SM, SM	A-2-4, A-4 	0-5 	0-7 	 90-100 	70-100	 55-95 	25-75 	18-30 	3-9
	19-24	Sandy loam, gravelly sandy loam	SM, SC-SM	A-2-4, A-4 	0-5	0-7 	75-100 	70-100 	40-70 	20-40	 18-28 	3-10
	24-32	Sandy loam, gravelly sandy loam	SC-SM	A-2-4, A-4 	0-5	0-7 	75-100 	70-100 	40-70 	20-40	 19-29 	5-11
	32-42	Loamy sand, gravelly loamy sand	SM, SC-SM	A-1-b, A-2-4 	0-5	0-7 	75-100 	70-100 	 35-75 	15-30	16-23 	2-6
	42-80	Loamy sand, gravelly loamy sand	GC-GM, GM, SC-SM, SM	A-1-b, A-2-4	0-5	0-7 	 60-95 	55-90 	30-75 	10-25 	0-23	NP - 6
Parkfalls	0-5	Sandy loam	SM	A-2-4	0-5	0-7	90-100	85-100	55-70	25-40	17-31	1-10
	5-8	Sandy loam, fine sandy loam	SM, SC-SM, ML, CL-ML	 A-2, A-4 	0-5	0-7		85-100			17-28 	2-7
	8-17	Sandy loam, loam, gravelly fine sandy loam	SC-SM, CL-ML, ML, SM 	A-2, A-4 	0-5 	0-7 	90-100	70-100	 55-95 	25-75 	18-30 	3-9
	17-30	Sandy loam, gravelly sandy loam	SC-SM, SM	A-2, A-4 	0-5	0-7 	75-100 	70-100 	40-70 	20-40	18-28 	3-10
	30-33	Sandy loam, gravelly sandy loam	SC-SM	A-2, A-4 	0-5	0-7 	75-100 	70-100 	40-70 	20-40	 19-29 	5-11
	33-48	Sandy loam, gravelly sandy loam	SC-SM	 A-1-b, A-2 	0-5 	0-7 	75-100 	70-100 	35-75 	15-30	 18-28 	 4-10
	48-80	Loamy sand, gravelly loamy sand	SM, GC-GM, GM, SC-SM	A-1-b, A-2 	0-5 	0-7 	 60-95 	 55-90 	30-75 	10-25	0-23	NP - 6

l Plas
ticity
index
NP
2-7
4-10
1-7
i
i
NP-6
İ
İ
i
i
i
i
i
i
3-15
3-10
9-15
İ
İ
3-10
İ
1
1-6
1-6 NP-2
NP-2
NP-2 NP-1
NP-1
i
NP-6
NP-2
NP
5 9

Table 23.--Engineering Index Properties--Continued

Map symbol	Depth	USDA texture	Classi	fication	Fragi	ments		rcentag sieve n	-	-	 Liquid	 Plas-
and	_	İ		1	>10	3-10					limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In				Pct	Pct			[[Pct	
3276A:						 	 	 				
Au Gres	0-2	Highly decomposed plant material	PT	A-8 	0	0	100	100	 			NP
	2-5	Loamy sand	 SP-SM, SM, SC-SM	 A-1-b, A-2-4, A-3	 0 	 0 	 95-100 	 85-100 	 25-75 	5-30	0-25	 NP-7
	5-8	Loamy sand, sand, loamy coarse sand	SP-SM, SM, SC-SM	A-1-b, A-2-4, A-3	 0 	 0 	 95-100 	 85-100 	 25-75 	5-30	0-25	 NP - 7
	8-16	Loamy sand, sand, loamy coarse sand	SP-SM, SM,	A-1-b, A-2-4, A-3	0 	0 	 95-100 	85-100 	 25-75 	5-30	0-25	 NP - 7
	16-28	Sand, loamy sand, coarse sand	SM, SP-SM, SC-SM	A-2-4, A-3, A-1-b	0 	0 	95-100 	85-100 	25-75 	5-30	0-25	NP - 7
	28-60	Sand, coarse sand	SM, SP-SM	A-1-b, A-2-4, A-3	 0 	 0 	 95-100 	 85-100 	 25-70 	5-25	0-14	NP
3312B: Glendenning,		 	 		 	 	 	 	 	İ		
very stony	0-5	Sandy loam	SC-SM, SM	A-2, A-4	0-5	0-7	80-100	75-98	50-60	25-45	15-25	NP-5
	5-15	Sandy loam, fine sandy loam, gravelly loam	SC-SM, SM	A-2, A-4	0 	0-15 	55-100 	50-98 	35-75 	15-40	15-25 	NP - 5
	15-20	Sandy loam, fine sandy loam, gravelly loam	SC-SM, SM 	A-2-4, A-4	0 	0-15 	 55-100 	50-98 	35-75 	15-40	15-28	NP - 5
	20-26	1	 SC-SM, SM 	A-2-4, A-4 	 0 	 0-15 	 55-100 	 50-98 	 35-75 	15-40	 15-28 	 NP - 5
	26-40	1	 SC-SM, SM 	A-2-4, A-4	 0 	0-15 	 55-100 	 50-98 	 35-75 	15-40	15-25	 NP-10
	40-65	1	 SC-SM, SM 	A-2-4, A-4	 0 	0-15 	 55-100 	 50-98 	 35-75 	15-40	 15-25 	 NP-10
	65-80	1	 SM, SC-SM 	 A-2-4, A-4 	 0 	 0-15 	 55-100 	 50-98 	 35-75 	 15-40 	 15-25 	 NP - 5

Map symbol	Depth	USDA texture	Classif	ication	Fragi	ments		rcentago sieve n	_	-	 Liquid	 Plas-
and	j	İ			>10	3-10	i				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In	Ţ	ļ į	Ţ.	Pct	Pct	[Pct]
3312B:	 		 			 	 	 	 			
Glendenning	0-7	Sandy loam	SC-SM, SM	A-2, A-4	0	0-15	80-100	75-98	50-60	25-45	15-25	NP-5
	7-15	Sandy loam,	SM, SC-SM	A-2, A-4	0	0-15	55-100	50-98	35-75	15-40	15-25	NP-5
		fine sandy										
		loam, gravelly										
		loam										
	15-20	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	55-100	50-98	35-75	15-40	15-28	NP-5
		fine sandy		!			!					
		loam, gravelly					!		!			
		loam										
	20-26	Sandy loam, fine sandy	SM, SC-SM	A-2-4, A-4	0	0-15	55-100	50-98	35-75	15-40	15-28	NP-5
	l I	loam, gravelly	I	I I		 		l I	l I	1	1	l I
	 	loam, graverry	1			 		 	 			
	26-40	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	 55-100	 50-98	 35-75	15-40	15-25	 NP-10
	20 20	loam, gravelly	1 -	,		0 20						
	İ	fine sandy	İ	İ	i	i	i	İ	İ	i		İ
	į	loam	İ	İ	i	į	i	į	į	i	İ	İ
	40-65	Sandy loam,	SM, SC-SM	A-2-4, A-4	0	0-15	55-100	50-98	35-75	15-40	15-25	NP-10
		loam, gravelly										
		fine sandy										
		loam										
	65-80	Sandy loam,	SC-SM, SM	A-2-4, A-4	0	0-15	55-100	50-98	35-75	15-40	15-25	NP-5
		gravelly fine										
	l I	sandy loam	l I		l I	 	 	 	 			l I
3336A:	İ		İ	İ	i	İ	İ	İ		İ		
Fenander		Fine sandy loam	1	A-4	0	0				45-50	1	1
	9-15	Fine sandy	SM, SC-SM,	A-4	0	0	95-100	93-100	75-90	35-75	17-28	2-10
		loam, sandy	ML, CL-ML									
	 	loam, silt						 	 			
	 15_27	Loam, sandy	SC-SM, CL-ML	 a _ 4	0	 0	 95_100	 93_100	 75_90	 35-75	 21_31	6-12
	13-27	loam, fine	CE-ME				JJ-100 	JJ-100	73-30 	33-73	21-31	0-12
	İ	sandy loam,		i	i	<u> </u>	i	İ	i	i		i
	İ	silt loam	İ	İ	i	i	i	İ	İ	i	İ	İ
	27-33	Fine sandy	SC-SM	A-4	0	0	95-100	93-100	75-90	35-45	21-31	6-12
		loam, sandy										
		loam, loam										
	33-80	Stratified	SC-SM	A-2-4, A-4	0	0	95-100	93-100	45-85	10-50	16-32	2-13
		loamy fine					!	ļ				
		sand to fine										
	I	sandy loam		1				I	I	1		

Table 23.--Engineering Index Properties--Continued

Table 23.--Engineering Index Properties--Continued

10 ches ct	3-10 inches Pct	4	ieve nu	mber		Liquid limit	
ches	inches	4	10	40		limit	+ 4 - 4 + -
ct		4	10	40			LICILY
į	Pct				200		index
0	I	1	ļ	.	! 	Pct	
0	1						
	0	100	100	100	100		NP
0	0	100	100	100	100		NP
0	0	100	100	100	100		
0	0-2	80-100	75-100	45-100	25-90	20-33	4-13
				ı J	I		
			ļ	.	i		
0	0	100	100	 			
0	0	100	100				
0	0	100	100	50-100	10-90	0-59	NP-9
- 1				ı J	J		
					1		
					1		
0	0	45-100	35-100	15-90	0-45	0-23	NP-6
			ļ	,	i I		
-			ļ	.			
- !				.	I		
-2	0-5	90-100	85-100	80-100	70-90	20-32	2-7
-2	0-5	90-100	85-100	80-100	70-90	18-28	2-7
-5	0 - 7	60-100	50-90	30-90	15-80	17-28	3-10
					I		
. !					!		
_ !							
-5	0-7	60-100	50-90	30-80	15-65	18-30	3-12
!			ļ	.	i		
-	0.7	(0.100	F0 00	20 00	15 65	110 20	3-12
-5	0-7	90-T00	50-90	30-80	15-65	18-30	3-12
- 1	l i		ļ		ı		
-5	!		E0 00 1	25-70	10-25	0-23	ND-6
	0-7	60-700			,	0-23	MF-0
i	0-7	60-100	130-90		!	1	
į	0-7 	60-100	30-90				
	2 .5 .5 .5	2 0-5 2 0-5 5 0-7 1 5 0-7 6 0-7	2 0-5 90-100 2 0-5 90-100 5 0-7 60-100 	2 0-5 90-100 85-100 2 0-5 90-100 85-100 5 0-7 60-100 50-90	2 0-5 90-100 85-100 80-100 2 0-5 90-100 85-100 80-100 5 0-7 60-100 50-90 30-80	2 0-5 90-100 85-100 80-100 70-90 2 0-5 90-100 85-100 80-100 70-90 5 0-7 60-100 50-90 30-90 15-80 	2 0-5 90-100 85-100 80-100 70-90 20-32 20-5 90-100 85-100 80-100 70-90 18-28 5 0-7 60-100 50-90 30-90 15-80 17-28

Table 23.--Engineering Index Properties--Continued

			Classif	ication	Frag	ments		_	e passi	_		
Map symbol	Depth	USDA texture	ļ		ļ			sieve n	umber		Liquid	
and					>10	3-10					limit	
soil name			Unified	AASHTO		inches	4	10	40	200	<u> </u>	index
	In				Pct	Pct			ļ		Pct	
3424C:			 	 			 		 			
Magroc	0-2	Silt loam	CL-ML, CL, ML	A-4	0	0-15	90-100	75-100	70-100	65-90	15-28	NP-9
	2-11	Silt loam	CL-ML, CL, ML	A-4	0	0-15	90-100	75-100	70-100	65-90	15-28	NP-9
	11-22	Silt loam, gravelly silt loam	CL, ML, CL-ML 	A-4 	0 	0-15 	65-100 	55-100 	50-100 	45-90 	15-28 	NP - 9
	22-30	Sandy loam, loam, gravelly sandy loam	1 -	A-1, A-2, A-4	0 	0-45	60-95 	50-90 	35-85	20-70	15-28 	NP - 9
	30-45	Gravelly loamy sand, loamy sand	SC-SM, SC, SM 	A-1-b, A-2 	0 	0-45	60-95 	50-90 	30-75	 15-25 	0-20	NP - 9
	45-50	Gravelly loamy sand, loamy sand	SC, SC-SM, SM 	A-1-b, A-2 	0 	0-45 	 60-95 	 50-90 	30-75 	15-25 	0-20	NP - 9
	50-80	Unweathered bedrock		 	0 	0	0 	0 	0	0		
Stinnett	0-4	Silt loam	CL-ML, ML	 A-4	0-2	0-5	 90-100	 85-100	80-100	70-90	20-32	2-7
	4-7	Silt, silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
	7-18	Silt, silt loam	CL-ML, ML	A-4	0-2	0-5	90-100	85-100	70-100	65-100	0-25	NP-7
	18-29	Silt loam	CL, CL-ML	A-4	0-2	0-5	90-100	85-100	80-100	70-90	18-29	4-11
	29-34	Loam, sandy loam, gravelly sandy loam		A-1-b, A-2-4, A-4 	0-5 	0-7 	60-100 	50-90 	30-90 	15-70 	17-28 	3-10
	34-41	Sandy loam, loam, gravelly sandy loam	SC, SM 	A-1-b, A-2-4, A-4 	0-5 	0-7 	60-100 	50-90 	30-90 	15-70 	18-30 	3-12
	41-55	Loamy sand, gravelly loamy sand		A-1, A-2-4 	0-5 	0-7 	60-100 	50-90 	25-70 	15-25 	0-23	NP - 6
	55-80	Loamy sand, gravelly loamy sand		A-1, A-2-4 	0-5	0-7	60-100 	50-90	25-70 	15-25 	0-23	NP - 6
Rock outcrop.		 	 	 	 	 	 	 		 	 	

Table 23.--Engineering Index Properties--Continued

			Classi	fication	Fragi	ments	Pe:	rcentag	e passi	.ng		
Map symbol	Depth	USDA texture			_		:	sieve n	umber		Liquid	
and					>10	3-10	ļ				limit	ticity
soil name			Unified	AASHTO	inches	inches	4	10	40	200		index
	In		!		Pct	Pct					Pct	ļ
3446A:							 	 	 			
Newson	0-3	Muck	PT	 A-8	0	0	100	100	 			 NP
Newbon	3-8	Loamy sand,	SM	A-2, A-3	0	0		75-100	I	5-15	0-14	NP
	3-0	mucky sand	DM	A-Z, A-3	0		00 - 1 00	73-100 	30 - 70 	3-13	0-11	141
	8-16	Sand, loamy	SM	A-2, A-3	0	0	 80-100	75-100	 50-70	5-15	0-14	 NP
	0 10	sand		11 27 11 3			00 100	73 100	30 70	3 13	0 11	111
	16-22	Sand, loamy	SM	A-2, A-3	0	0	 80-100	 75-100	 50-70	5-15	0-14	 NP
		sand		/				/ 2 _ 2 0 0		5 25	0 ==	
	22-60	Sand, loamy	SM	A-2, A-3	i o	0	80-100	75-100	50-70	5-15	0-14	NP
		sand						/ 2 _ 2 0 0		5 25	"	
			i	i	i	i	i I	! 	i	i	i	i
3448B:			i	i	i	i	İ	! 	i	i	i	i
Grettum	0-3	Loamy sand	SC-SM, SM	A-2-4	0	0	90-100	85-100	60-80	15-25	0-23	NP-6
		Sand, loamy	SC-SM, SM	A-2-4, A-3	0	0		85-100		5-20	0-23	NP-6
i		sand			i	i	İ		i	i		i
	32-75	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
		sand	i	i	i	i	İ	İ	İ	i	i	i
i	75-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-21	NP-4
i		İ	İ	i	i	i	İ	İ	İ	i	i	İ
3448C:		İ	İ	i	i	i	İ	İ	į	i	i	i
Grettum	0-3	Loamy sand	SC-SM, SM	A-2-4	0	0	90-100	85-100	60-80	15-25	0-23	NP-6
į	3-32	Sand, loamy	SM, SC-SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
j		sand	İ	j	ĺ	İ	ĺ	ĺ	ĺ	ĺ	İ	İ
j	32-75	Sand, loamy	SC-SM, SM	A-2-4, A-3	0	0	90-100	85-100	70-95	5-20	0-23	NP-6
j		sand	İ	j	ĺ	İ	ĺ	ĺ	ĺ	ĺ	İ	İ
j	75-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-21	NP-4
3516A:												
Slimlake	0 - 6	Sandy loam	SM	A-4	0	0-7	90-100	85-100	50-70	30-40	17-29	1-6
	6-17	Sandy loam	SC-SM, SM	A-2-4, A-4	0	0-7	90-100	85-100	50-70	30-40	15-23	1-6
	17-42	Gravelly sand,	SP-SM	A-1	0	0-7	70-90	65-85	35-55	5-15	0-17	NP-1
		loamy sand										
	42-53	Gravelly sand,	SP-SM	A-1	0	0-7	70-90	65-85	35-55	5-10	0-17	NP-1
		sand, coarse										
		sand										
	53-80	Sand, gravelly	SP-SM	A-1	0	0-7	70-90	65-85	35-55	5-10	0-17	NP-1
		sand, coarse										
		sand										

Soi
Sur
é
호

Depth	 USDA texture 	Classification		Fragments		Percentage passing				 Liquid	 Plas-
						sieve number					
		 Unified	AASHTO	>10 inches	3-10 inches	<u> </u>				limit	ticity
						4	10	40	200	<u> </u> :	index
In				Pct	Pct					Pct	
	 			1		 					
0 - 9	Loamy sand	SM	A-2	0	0	90-100	80-100	60-75	15-25	0-14	NP
9-43	Sand, loamy sand, fine	SM	A-2 	0	0	90-100 	80-100 	60-75 	15-25 	0-14 	NP
	sand										
13-45	Loamy sand, sand,	SM	A-2	0	0	90-100	80-100	60-75	15-25	0-14	NP
	sand										
15-60	Clay, silty clav	CH	A-7	0	0 	100 	100 	90-100 	75-100 	64-90	40-60
0-74	Silty clay,	СН	A-7	0	0	100	100	90-100	75-100	64-90	40-60
4-80	Sand	SM	A-2-4, A-3	0	0	90-100	85-100	55-75	5-15	0-14	NP
				-							
	 			}		 	 	 	 		
		İ					ļ	ļ	ļ		ļ
	In 0-9 9-43 3-45 5-60	In 0-9 Loamy sand 9-43 Sand, loamy sand, fine sand 3-45 Loamy sand, sand, fine sand 5-60 Clay, silty clay	Unified In	Unified AASHTO In	Unified AASHTO inches		Unified AASHTO inches inches 4	Vinified AASHTO inches inches 4 10	Note Note	Note Note	Name

Table 24.--Physical Properties of the Soils

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated)

Map symbol	Depth	 Clay	 Moist	Permea-	 Available	1	 Organic	Erosi	on fac	tors	erodi-	Wind erodi-
and soil name			bulk density	bility	water capacity	extensi- bility	matter	 Kw	 Kf	 T	bility group	
	T	Pct	g/cc	In/hr	In/in	Pct	Pct	KW	KL	-	group	Index
	In	PCt 	g /ee	In/nr	In/in	PCC	PCt		 	l I	 	
3A:		 	 			! 		1			 	i
Totagatic	0-4	0-0	0.15-0.45	6.00-20	0.35-0.45		55-85	.02	.02	5	8	0
	4-8		1.40-1.65		0.05-0.15		0.0-0.5	.10	.15	i	-	i
	8-17		1.40-1.65		0.05-0.15		0.0-0.5	.10	.15	i	İ	i
	17-28	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15	İ	İ	i
	28-46	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15	ĺ	İ	İ
	46-70	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	İ
	70-80	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	ĺ
Bowstring	0-38	0 - 0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
	38-47	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	47-80	0 - 0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02			
Ausable	0-10		0.15-0.45		0.35-0.45		55-85	.02	.02	2	8	0
	10-60	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ļ		!
												!
22A:										_	-	= -
Comstock	0-8			0.60-2.00	0.20-0.24		2.0-4.0	.37	.37	5	5	56
	8-15			0.60-2.00	0.20-0.22		0.0-1.0	.43	.43			
	15-21			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43			
	21-34 34-44			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43			
	44-60		1.40-1.70	0.60-2.00 0.20-0.60	0.12-0.22		0.0-0.5	37	37		 	
	44-60 	8-20 	1.40-1.65	0.20-0.60	0.12-0.22	0.0-2.9	0.0-0.5	.3/	.3/	 	 	
24A:		 	 		i i	 	1	ì	 		 	i
Poskin	 0-9	13-17	1.35-1.55	0.60-2.00	0.21-0.24	0.0-2.9	2.0-4.0	.37	.37	4	5	56
	9-12		1.55-1.65		0.17-0.22		0.0-1.0	.43	.43	i -	-	
	12-19			0.60-2.00	0.17-0.22		0.0-1.0	.43	.43	i		i
	19-36			0.60-2.00	0.17-0.22		0.0-0.5	.43	.43	i	İ	i
	36-39		1.40-1.65		0.05-0.22	0.0-2.9	0.0-0.5	.24	.24	İ	İ	i
	39-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	į	į	į
		İ	į į		İ	ĺ	İ	İ	İ	ĺ	İ	İ
27A:												
Scott Lake	0-10	6-15	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	2.0-3.0	.24	.24	4	3	86
	10-17	6-15	1.40-1.70	0.60-2.00	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
	17-24			0.60-2.00	0.11-0.13	0.0-2.9	0.0-0.5	.24	.24			
	24-31	1	1.45-1.70		0.02-0.10	!	0.0-0.5	.17	.17			
	31-80	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ļ		!
										ļ		
28B:				0 60 0 00				0.4	0.4			
Haugen, very stony	0-4		1.40-1.65		0.12-0.14		1.0-3.0	.24	.24	5	8	0
	4-15		1.40-1.70 1.40-1.70		0.08-0.19		0.5-1.0	.24	.24			
	15-23	1			0.08-0.19		0.5-1.0	.24	.24			
	23-35 35-49			0.60-2.00			0.0-0.5	.24	.24		 	
	35-49 49-79			0.20-0.60 0.20-0.60				.24	.24		 	
	49-79 79-80			0.20-0.60			0.0-0.5	.24	.24	 	 	
	,,,=00 	0-13		3.01-0.00				•23	• 2 3	i		i
Haugen	0-7	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
2	7-15			0.60-2.00				.24	.24	i	İ	i
	15-23			0.60-2.00			0.5-1.0	.24	.24	i	į	i
	23-35			0.60-2.00				.24	.24	İ	į	i
	35-49			0.20-0.60			0.0-0.5	.24	.24	İ	İ	į
	49-79			0.20-0.60	•		0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			
			l i		1			1				

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	 Moist	Permea-	Available		Organic	Erosi	on fac		erodi-	Wind erodi-
and soil name			bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf		bility group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
												ļ
28B: Rosholt, very stony	0-4	4-10	 1 50_1 60	0.60-6.00	0.12-0.14	 0.0-2.9	1.0-3.0	.24	 .24	 4	 3	86
ROSHOTC, Very Scony	4-10	1			0.05-0.16	1	0.0-1.0	.24	.24	* 	3	00
	10-14	1		0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24	İ		i
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
j	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	ĺ	İ	ĺ
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
Rosholt	0-8	4-10	 1 50-1 60	0.60-6.00	0.12-0.14	0 0-2 9	1.0-3.0	.24	 .24	 4	 3	86
ROSHOTC	8-10		1.70-1.80		0.05-0.16		0.0-1.0	.24	.24	* 	3	00
i	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	! 		i
i	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	İ	İ	i
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	İ	į	į
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
28C:												
Haugen, very stony	0-4	 6-14	 1 40-1 65	0.60-2.00	0 12-0 14	 0 0-2 9	1.0-3.0	.24	.24	 5	3	 86
naugen, very scony	4-15			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24]	3	00
	15-23	1			0.08-0.19		0.5-1.0	.24	.24	İ	İ	İ
İ	23-35	,		0.60-2.00	0.05-0.16		0.0-0.5	.24	.24	İ	İ	İ
j	35-49	6-16	1.40-1.70	0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	İ
	49-79	1		0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			ļ
Haugen	0-7	6-14	 1 40-1 65	0.60-2.00	0.12-0.14	0 0-2 9	1.0-3.0	.24	 .24	 5	 3	86
naugen	7-15			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24]	3	00
i	15-23	1			0.08-0.19	1	0.5-1.0	.24	.24	İ	İ	i
	23-35	5-15	1.40-1.70	0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24	į	İ	į
j	35-49	6-16	1.40-1.70	0.20-0.60	0.05-0.13	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	ĺ
	49-79	1		0.20-0.60	0.05-0.13	1	0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24			
Rosholt, very stony	0-4	4-10	 1 50-1 60	0.60-6.00	0.12-0.14	 0 0-2 9	1.0-3.0	.24	.24	 4	 3	 86
Robhote, very beeny	4-10		1.70-1.80		0.05-0.16	1	0.0-1.0	.24	.24	-	3	
i	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	İ	İ	İ
İ	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	İ
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
Rosholt	0-8	4-10	 1 50-1 60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	 4	 3	 86
RODIIO10	8-10		1.70-1.80		0.05-0.16		0.0-1.0	.24	.24	-	3	00
i	10-14	1		0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24	İ	İ	i
İ	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	İ
	28-34			0.60-6.00	•			.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
33B:		 				 			 	 	 	1
Chetek	0-10	4-12	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	 3	3	86
j	10-16	1		0.60-2.00	1	1	1	.24	'	İ	į	İ
İ	16-20		1.60-1.70		0.02-0.10	0.0-2.9	0.0-0.5	.17	.17			
	20-60	1-3	1.50-1.60	6.00-20	0.02-0.04	0.0-2.9	0.0-0.5	.10	.15			ļ
33C:						 		1	 	 		1
Chetek	0-10	4-12	 1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	 3	3	 86
	10-16	1		0.60-2.00	1	1	1	.24	'	į -		
j	16-20	,	1.60-1.70		0.02-0.10			.17	.17	İ	į	İ
	20-60	1 1 2	1.50-1.60	6 00 00	10 00 0 04	0.0-2.9		.10	.15	ı	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	 Depth	Clay	 Moist	Permea-	Available		 Organic	Erosi	on fac	tors	erodi-	Wind erodi-
and soil name			bulk	bility	water	extensi-	matter			! _	bility	
	<u> </u>	<u> </u>	density		capacity	bility		Kw	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			 	 	
38A:	 	 	 			I I	l I		 	 	 	l I
Rosholt	0-8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24	İ	ĺ	İ
	10-14	5-14	1.70-1.80	0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24	İ	į	į
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24			
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
										ļ		
38B: Rosholt	 0-8	4 10		 0.60-6.00			1.0-3.0	.24	.24	 4	 3	 86
ROSHOIC	0-8 8-10			0.60-6.00	0.12-0.14		0.0-1.0	.24	.24	4± 	3 	86
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	l I	 	
	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	i I	 	
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17	i	! 	
	34-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i	İ	į
		į			j	İ	į	į	i i	İ	İ	į
38C:												
Rosholt	0-8			0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	.24			
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24			!
	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	ļ		
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17			
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 	 	l I
38D:	 	 	 			 			 	l I	 	
Rosholt	0-8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
	8-10			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	i -		
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	i	İ	i
	14-28	6-15	1.65-1.75	0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	i	İ	İ
	28-34	4-12	1.55-1.65	0.60-6.00	0.02-0.10	0.0-2.9	0.0-0.5	.10	.17	i	İ	į
	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ĺ	ĺ	ĺ
42D:					!			!				!
Amery	0-3			0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	3-22			0.60-2.00	0.09-0.19		0.0-0.5	.24	.24			
	22-34			0.20-0.60	0.07-0.16		0.0-0.5	.24	.24		 	
	34-41 41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.24	 	l I	l I
	57-71			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	l I	 	
	71-80		1.80-2.00		0.07-0.15		0.0-0.5	.28	.28	 	 	l I
										İ	İ	İ
43B:	İ	į	İ		j	İ	İ	į	į	İ	į	į
Antigo	0-9	8-15	1.25-1.55	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.37	.37	4	5	56
	9-12	8-15	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	0.0-1.0	.43	.43			
	12-19		•	0.60-2.00	•		0.0-0.5	.43	.43			
	19-28			0.60-2.00	•			.43	.43			!
	28-31			0.60-2.00	•				.24	ļ		
	31-33		1.55-1.70 1.55-1.80	0.60-2.00	•			.24	.24			
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	l I	l I	l I
43C:	! 	! 	! 			! 	I I	İ	! 	i	 	İ
Antigo	0-9	8-15	1.25-1.55	0.60-2.00	0.20-0.24	0.0-2.9	1.0-3.0	.37	.37	4	 5	56
-	9-12			0.60-2.00	•				.43	i	İ	İ
	12-19			0.60-2.00	•				.43	İ	İ	İ
	19-28			0.60-2.00	•				.43			
	28-31	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24			
	31-33	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24			
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay 	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	Erosi	on fact	tors		Wind erodi-
and soll hame		 	density	DITICY	capacity	bility	Maccel	Kw	 Kf	 т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	1		<u> </u>		
İ		ĺ	į į		İ		Ì	İ	İ	İ	İ	İ
43D:												
Antigo	0-9 9-12			0.60-2.00	0.20-0.24		1.0-3.0	.37	.37	4	5	56
	12-19		1.35-1.55 1.55-1.65		0.20-0.22		0.0-1.0	.43	.43	 	 	
	19-28				0.16-0.22		0.0-0.5	.43	.43			
i	28-31	'		0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	i	İ
İ	31-33	2-17	1.55-1.70	0.60-2.00	0.05-0.19	0.0-2.9	0.0-0.5	.24	.24	ĺ	ĺ	Ì
	33-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
48A:		 										
*6A: Brill	0-7	 10-20	 1 25-1 45	0.60-2.00	0.20-0.24	 0 0-2 9	2.0-4.0	.37	 .37	 4	 5	 56
	7-11			0.60-2.00	0.16-0.22		0.0-1.0	.43	.43	-		30
i	11-19	10-20	1.40-1.55	0.60-2.00	0.16-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	i	i
İ	19-34	18-27	1.50-1.60	0.60-2.00	0.16-0.22	0.0-2.9	0.0-0.5	.43	.43	ĺ	ĺ	
	34-38			0.60-2.00	•		0.0-0.5	.24	.24			
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
63A:		 	 				 		 	 		
Crystal Lake	0-8	 8-20	 1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	 5	 5	56
	8-12	'	1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			i
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
	20-32		1.50-1.60		0.18-0.22		0.0-0.5	.43	.43		[
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			ļ
63B:		 -				 			 	 		
Crystal Lake	0-8	 8-20	 1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	 5	 5	56
01/2001 1000	8-12				0.20-0.22		0.0-1.0	.43	.43			
i	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	į	į	į
I	20-32				0.18-0.22		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
63C:		 -				 			 	 		
Crystal Lake	0-8	 8-20	 1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	 .37	 5	 5	56
01/2001 1000	8-12		1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
I	20-32		1.50-1.60		0.18-0.22		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			ļ
63E:		 	 				 		 	 		
Crystal Lake	0-8	 8-20	 1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-4.0	.37	.37	 5	 5	56
	8-12		1.40-1.60		0.20-0.22		0.0-1.0	.43	.43			i
İ	12-20	15-27	1.40-1.60	0.60-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.43	.43	İ	į	į
	20-32			0.60-2.00	1		0.0-0.5	.43	.43			
	32-60	8-20	1.40-1.65	0.20-0.60	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
64A:		 	 				 		 	 		
Totagatic	0-4	 0-0	 0.15-0.45	6.00-20	0.35-0.45		55-85	.02	.02	 5	 8	l 0
	4-8		1.40-1.65		0.05-0.15		0.0-0.5	.10		į -		
j	8-17		1.40-1.65		0.05-0.15	0.0-2.9	0.0-0.5	.10	.15			
	17-28		1.40-1.65		0.05-0.10			.10	!			ļ
	28-46		1.40-1.65		0.05-0.10		1	.10	!			
	46-70 70-80		1.40-1.65 1.40-1.65		0.02-0.10			1.10	.15 .15	 	 	I
	70-00	0-10		3.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15	 	! 	
Winterfield	0-7	0-15	 0.90-1.50	6.00-20	0.09-0.11	0.0-2.9	2.0-4.0	.10	.10	5	2	134
WINCCILLCIA												

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	 Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	
and soil name		 	bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i	i .	i	<u> </u>	i i
İ		ĺ			İ		İ	İ	ĺ	ĺ	ĺ	ĺ
69B:					İ		!	[
Keweenaw	0-2			2.00-6.00	0.10-0.12		1.0-2.0	.10	.10	5	2	134
	2-4			2.00-6.00	0.09-0.14		0.5-1.0	.17	.24			
	4-16 16-20			2.00-6.00	0.08-0.13		0.0-0.5	1.17	.24		 	
	20-27			0.60-6.00	0.05-0.10		0.0-0.5	1.17	.24		l I	
	27-43			0.60-6.00	0.05-0.10		0.0-0.5	1.17	.24		 	
	43-75			0.60-6.00	0.08-0.13		0.0-0.5	.17	.24	i	! 	i
i	75-80			2.00-6.00	0.05-0.10		0.0-0.5	.17	.17	į	İ	i
İ		ĺ			İ	ĺ	İ	İ	ĺ	ĺ	ĺ	ĺ
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	1.10	.10			
	4-7		1.35-1.65		0.03-0.11		1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02			
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ļ		!
77-1	0.0		1 25 1 4-	6 60 60						-		
Vilas	0-2		1.35-1.65		0.09-0.12		1.0-3.0	.10	1.10	5	2	134
	2-4 4-11		1.35-1.65		0.09-0.11			.10	.10		 	
	11-23		1.50-1.65 1.50-1.70		1		1.0-2.0	.10	1.10		 	
	23-32		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02		 	
	32-80		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02		 	
	32 00	0 3		0.00 20		0.0 2.5	0.0 0.5	.02	.02	i	 	i
69C:		İ			i	İ	i	i	i	i	İ	i
Keweenaw	0-2	2-10	1.35-1.60	2.00-6.00	0.10-0.12	0.0-2.9	1.0-2.0	.10	.10	5	2	134
İ	2-4	2-15	1.45-1.80	2.00-6.00	0.09-0.14	0.0-2.9	0.5-1.0	.17	.24	İ	İ	İ
İ	4-16	2-15	1.55-1.80	2.00-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24	İ	İ	İ
	16-20	2-10	1.55-1.80	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	20-27	2-10	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
I	27-43	2-15	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	43-75	5-20	1.55-1.80	0.60-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24			
	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
										_		
Sayner	0-2			2.00-6.00	0.08-0.12		1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.55		0.04-0.11		0.5-1.0	.10	.10			
	4-7		1.35-1.65		0.03-0.11		1.0-2.0	.10	.10			
	7-14 14-22		1.35-1.65 1.45-1.70		0.03-0.11		1.0-2.0	02	.02		 	
	22-60		1.55-1.80		0.03-0.11		0.0-0.5	1.10	1.15		 	
	22-00	0-3	1.33-1.60	0.00-20	0.01-0.07	0.0-2.9	0.0-0.3	.10	.13		 	
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11		0.5-1.0	.10	.10	i	İ	i
i	4-11	:	1.50-1.65		0.09-0.11	:	1.0-2.0	.10	.10	i	İ	i
İ	11-23	0-10	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.02	.02	İ	İ	İ
	23-32	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ĺ	ĺ	İ
İ	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	ĺ	ĺ	ĺ
69E:								ļ		ļ		
Keweenaw	0-2		•	2.00-6.00	•	•	1.0-2.0	.10	.10	5	2	134
	2-4			2.00-6.00	'			1	.24			
	4-16			2.00-6.00		•		1	.24			
	16-20		•	2.00-6.00	•	•	1					1
	20-27			0.60-6.00				.17	.24		 	
	27-43 43-75			0.60-6.00		•			.24	1	l I	1
	43-75 75-80			0.60-6.00 2.00-6.00		•		17	.24 .17	I I	l I	1
l	13-00		1 20 - 1 - 70	2.00-0.00	10.02-0.10	0.0-2.9	0.0-0.5	/	/	!	!	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	Moist	Permea-	 Available		 Organic	Erosio	on fact	tors	erodi-	Wind erodi-
and soil name			bulk	bility	water	extensi-	matter		 	_	bility	
			density		capacity	bility		Kw	Kf	T	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		 	 	 	l I
69E:		 	 				 	İ	 	 		İ
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
j	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10	ĺ	İ	İ
	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9	1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02			ļ
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
Vilas	0-2	2-10	 1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	 5	2	134
İ	2-4	2-10	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	İ	i	i
	4-11	2-10	1.50-1.65	6.00-20	0.09-0.11	0.0-2.9	1.0-2.0	.10	.10	İ	į	į
	11-23	0-10	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.02	.02			
	23-32		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02			
	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02			
74B:		 	 			 	 		 	 	 	
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
İ	2-4	2-10	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	İ	į	İ
	4-11	2-10	1.50-1.65	6.00-20	0.09-0.11	0.0-2.9	1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02			
	23-32		1.50-1.70		0.05-0.07		0.0-0.5	.02	.02			ļ
	32-80	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	 		
74C:		 							 			
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-11		1.50-1.65		0.09-0.11		1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02	ļ	!	!
	23-32 32-80		1.50-1.70 1.50-1.70		0.05-0.07		0.0-0.5	.02	.02 .02			
	32-80	U-5 	1.50-1.70 	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.UZ 	 	 	
74D:		! 						İ			<u> </u>	İ
Vilas	0-2	2-10	1.35-1.65	6.00-20	0.09-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4		1.35-1.65		0.09-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-11		1.50-1.65		0.09-0.11		1.0-2.0	.10	.10			
	11-23		1.50-1.70		0.05-0.10		0.0-0.5	.02	.02			ļ
	23-32 32-80		1.50-1.70 1.50-1.70		0.05-0.07		0.0-0.5	.02	.02 .02			
	32-80	U-5 	1.50-1.70 	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.UZ 	 	 	
100B:					<u> </u>		İ	İ		İ	İ	į
Menahga	0-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
100C:		 					 	l I	 	 	 	
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	1	220
	1-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	İ	į	İ
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
100D:		 	 		 	 	 		 	 	 	
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	1	220
-	1-2	0-8	1.40-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	İ	į	İ
	2-25		1.25-1.60		0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	25-80	0 10	1.50-1.65	6 00 00	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	1	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	Erosi	on fac	cors	1	Wind erodi-
and soil name		 	density	Bility	capacity	bility	matter	Kw	 Kf	 T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i		i		İ
		ĺ	İ		İ	ĺ	ĺ	İ	ĺ	ĺ	İ	İ
127D:												
Amery	0-3 3-22			0.60-2.00 0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	22-34			0.20-0.60	0.03-0.13		0.0-0.5	.24	.24	 	 	
j	34-41			0.20-0.60	0.07-0.16		0.0-0.5	.24	.24	İ		
	41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	ĺ	İ	i
İ	57-71	6-17	1.65-1.90	0.20-0.60	0.07-0.16	0.0-2.9	0.0-0.5	.20	.28	į	į	į
	71-80	4-15	1.80-2.00	0.02-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ļ		
Decil of the	0.4		1 50 1 60									
Rosholt	0-4 4-10			0.60-6.00 0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	10-14			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	 	l I	
i	14-28			0.60-6.00	0.06-0.19		0.0-0.5	.24	.24	İ		
	28-34			0.60-6.00	0.02-0.10		0.0-0.5	.10	.17	i	İ	i
İ	34-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	j	į	į
127E:										_		
Amery	0-3 3-22			0.60-2.00 0.60-2.00	0.12-0.14		1.0-3.0	.24	.24	5	3	86
	22-34			0.80-2.00	0.09-0.19		0.0-0.5	.24	.24	l I	 	
	34-41			0.20-0.60	0.07-0.16	1	0.0-0.5	.24	.24	 	l I	
i	41-57			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	İ		
İ	57-71			0.20-0.60	0.07-0.16		0.0-0.5	.20	.28	İ	İ	i
İ	71-80	4-15	1.80-2.00	0.02-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ĺ	į	į
		[]]				[
Rosholt	0-4			0.60-6.00	0.12-0.14		1.0-3.0	.24	.24	4	3	86
	4-10 10-14			0.60-6.00 0.60-6.00	0.05-0.16		0.0-1.0	.24	.24			
	14-28			0.60-6.00	0.05-0.16		0.0-1.0	.24	.24	l I	 	
i	28-34		1.55-1.65		0.02-0.10		0.0-0.5	.10	.17	İ		
	34-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	İ		i
İ		ĺ	İ		İ		İ	İ		ĺ	İ	ĺ
156B:												
Magnor, very stony	0-4			0.60-2.00	0.18-0.24		1.0-3.0	.37	.37	4	8	0
	4-11 11-16			0.60-2.00 0.60-2.00	0.17-0.22		0.0-1.0	.43	.43	l I	 	
	16-21			0.60-2.00	0.17-0.22		0.0-0.5	.43	.43		 	
	21-39			0.06-0.60	0.08-0.18		0.0-0.5	.28	.28	i	İ	i
İ	39-58	7-17	1.65-1.90	0.06-0.60	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28	j	į	į
	58-60	3-14	1.80-2.00	0.01-0.06	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			
											-	
Magnor	0-8 8-11				0.18-0.24		1.0-3.0	.37	.37	4	5	56
	11-16		1.55-1.65 1.55-1.65	0.60-2.00	0.17-0.22		1	1	.43	l I	 	
j	16-21			0.60-2.00				.43	.43	İ		
	21-39			0.06-0.60					.28	ĺ	İ	i
İ	39-58			0.06-0.60	•			.28	.28	j	į	į
	58-60	3-14	1.80-2.00	0.01-0.06	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			
								ļ				
157B: Freeon, very stony	0-4	 7_17	 1 25_1 55	0.60-2.00	10 19-0 24	0 0-2 9	1.0-3.0	.37		 4	8	 0
rieeon, very scony	4-19			0.60-2.00				.43	.43	=	•	0
	19-39			0.06-0.60				.28	.28	i		i
j	39-53			0.06-0.60	•				.28	İ	İ	İ
	53-80	3-14	1.80-2.00	0.01-0.06	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28			[
T				0.60.6.55							-	
Freeon	0-4			0.60-2.00	•		1.0-3.0	.37	.37	4	5	56
	4-19 19-39			0.60-2.00 0.06-0.60	•			.43	.43	I I	 	1
	39-53			0.06-0.60	•				.28	i		
	53-80			0.01-0.06			0.0-0.5	.28	.28	i		i
		i			i	į	i	ì	İ	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol	 Depth	 Clay	 Moist	Permea-	Available	 Linear	 Organic	Erosi	on fact	cors		Wind erodi-
and soil name	Depth		bulk	bility	water	extensi-	matter					bility
		į	density	_	capacity	bility	İ	Kw	Kf	т	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	1	I			
					İ		ļ	-	!	ļ		
157C:	 0-4	 717		0 60 2 00			1.0-3.0	.37	 .37	 4	 8	0
Freeon, very stony	0-4 4-19			0.60-2.00 0.60-2.00			0.1-1.0	.43	1	4± 	8	0
	19-39			0.06-0.60			0.0-0.5	.28	.28	 	 	i
	39-53	!		0.06-0.60	1		0.0-0.5	.28	.28	i	<u> </u>	i
	53-80	3-14	1.80-2.00	0.01-0.06	0.08-0.18	0.0-2.9	0.0-0.5	.28	.28	i	į	į
Freeon	0-4			0.60-2.00			1.0-3.0	.37	.37	4	5	56
	4-19			0.60-2.00	'		0.1-1.0	.43	.43			ļ
	19-39			0.06-0.60	'			.28	.28			
	39-53 53-80			0.06-0.60 0.01-0.06	0.08-0.18		0.0-0.5	.28	.28 .28	 	 	
	33-80	3-14	1.80-2.00	0.01-0.00		0.0-2.9	0.0-0.5	.20	.20	 	 	i i
160A:		İ			i		İ	i	i	İ		İ
Oesterle	0-7	8-15	1.40-1.70	0.60-6.00	0.12-0.14	0.0-2.9	2.0-3.0	.20	.20	4	3	86
	7-11	8-15	1.40-1.70	0.60-6.00	0.10-0.19	0.0-2.9	0.5-1.0	.24	.24			
	11-31	1		0.60-6.00	1		1	.24	1			
	31-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
182B:		 	 			 	 			 		
Padus	0-2	 3-15	 1.35-1.70	0.60-2.00	0.10-0.18	0.0-2.9	1.0-3.0	.24	.24	 4	3	86
- 4442	2-3	1		0.60-2.00	1		0.5-1.0		1	i -		
	3-19			0.60-2.00					1	İ	i	i
	19-26	5-15	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
	26-38	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24			
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			!
182C: Padus	 0-2	215	 1 25 1 70	0.60-2.00			1 1 0 3 0	24	.24	 4	 3	 86
Padus	2-3	1		0.60-2.00	1		0.5-1.0		1	"	3 	00
	3-19			0.60-2.00	'		1		1	İ		i
	19-26			0.60-2.00	'		0.0-0.5	.24		İ	i	i
	26-38	7-17	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	į	į	į
	38-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
192A: Worcester	 0-2	215		0.60-2.00			1020	.24	 .24	 4	 3	 86
worcester	0-2			0.60-2.00	'			.24	1	4± 	3	86
	3-6			0.60-2.00	'				1	 	 	i
	6-16			0.60-2.00	'		0.0-2.0	.24		i	i	i
	16-20			0.60-2.00	'		0.0-0.5	.24		i	i	i
	20-32	8-18	1.40-1.70	0.60-2.00	0.06-0.19	0.0-2.9	0.0-0.5	.24	.24	ĺ	İ	İ
	32-39	3-8	1.45-1.70	6.00-20	0.02-0.11	0.0-2.9	0.0-0.5	.10	.17			
	39-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
193A:		 				 -						
Minocqua	 0-4	 0-0	 0 15-0 45	2.00-6.00	0 35-0 45	 	30-60	02	.02	 4	 8	1 0
mmooquu	4-15	1		0.60-2.00	1				37	-	0	
	15-28			0.60-2.00						İ	i	i
	28-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	İ	İ
		!					[1			[
215B:				0 00 5 05								
Pence	0-3			2.00-6.00 0.60-6.00						3	3	86
	3-8 8-15			0.60-6.00	1				1	l I	I I	I I
	8-15		1.35-1.45 1.65-1.75		0.10-0.15					I I	 	
	21-60	1	1.55-1.80		0.01-0.07				1	i		İ
	i	i	i	-	i	İ	i	i	i	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay 	 Moist bulk	Permea- bility	Available water	 Linear extensi-	 Organic matter	Erosi	on fac	tors		Wind erodi-
and soll lidile			density	DITTLY	capacity	bility	macter	Kw	Kf	T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i	<u>. </u>	i i	<u> </u>	
		ļ				ļ	ļ	ļ			ļ	
215C:	0-3	215		2 00 6 00	0.11-0.15		1.0-3.0	.24	 .24	 3	 3	 86
Pence	3-8		1.30-1.70 1.35-1.65	2.00-6.00 0.60-6.00	0.11-0.15		0.5-1.0	.24	.24	3	3 	86
	8-15	!		0.60-6.00	0.10-0.15		1.0-2.0	.17	.24			
i	15-21		1.65-1.75		0.05-0.08	0.0-2.9	0.0-0.5	.05	.10	į	į	İ
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		[
01ED.												
215D: Pence	0-3	 3-15	 1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	 3	86
1 000	3-8	!		0.60-6.00	0.11-0.18		0.5-1.0	.24	.24			
i	8-15			0.60-6.00	0.10-0.15	0.0-2.9	1.0-2.0	.17	.24	į	į	İ
I	15-21	0-6	1.65-1.75	2.00-60	0.05-0.08	0.0-2.9	0.0-0.5	.05	.10			
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
315A:		 	 			l I	 	l I			 	l I
Rib	0-7	10-20	1.25-1.35	0.60-2.00	0.22-0.28	0.0-2.9	3.0-10	.32	.32	4	 5	56
	7-10			0.60-2.00	0.18-0.22		0.0-1.0	.43	.43	į	į	İ
İ	10-32	18-30	1.45-1.55	0.60-2.00	0.18-0.22	3.0-5.9	0.5-1.0	.43	.43	ĺ	ĺ	
	32-35	!		0.60-2.00	0.10-0.19	1	0.0-0.5	.32	.32			
	35-37		1.65-1.75		0.05-0.08		0.0-0.5	.10	.15			
	37-60	0-5 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		 	l I
337A:					i					i		
Plover	0-10	3-8	1.35-1.65	0.60-2.00	0.13-0.18	0.0-2.9	2.0-3.0	.28	.28	5	3	86
I	10-13	5-15	1.40-1.70	0.60-2.00	0.15-0.19	0.0-2.9	0.5-1.0	.24	.24			
	13-18			0.60-2.00	0.15-0.19		0.5-1.0	.24	.24			
	18-32 32-60	!	1.50-1.70 1.50-1.70	0.60-2.00 0.20-0.60	0.12-0.17		0.5-1.0	.24	.24			
	32-60	5-12	1.50-1.70 	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	•24 		 	l l
368B:					i		İ	ì	<u> </u>	i	! 	İ
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
	5-8		1.40-1.50		0.02-0.07		0.0-0.5	.10	.10		[
	8-15	!	1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	15-30 30-60		1.45-1.75 1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		 	l I
	30-00	0-10	1.43-1.73	0.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10		 	l I
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
İ	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	į	į	į
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15		 	l I
368C:					i		İ	ì	<u> </u>	i	! 	İ
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
I	5-8	1	1.40-1.50		0.02-0.07		0.0-0.5	.10	.10			
	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	15-30 30-60		1.45-1.75 1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		 	
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10		 	l l
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
İ	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	į	į	į
	15-31		1.50-1.80		0.02-0.10			.17	.17		[
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17			
	36-60	 T-0	1.55-1.80	6.00-20	0.01-0.07	U.U-2.9 	0.0-0.5	.10	.15	 	[[l I
368D:		! 	 			! 	! 				! 	
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
j	5-8		1.40-1.50		0.02-0.07			.10	.10	İ	İ	İ
İ	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10		[
	15-30		1.45-1.75		0.02-0.07		1	.05	.10			
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10	1		1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	Moist	Permea-	Available	1	Organic	Erosi	on fac	tors	erodi-	Wind erodi
and soil name		 	bulk density	bility	water capacity	extensi- bility	matter	 Kw	 Kf	 T	bility group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			-		
2600												
368D: Cress	0-3	 5-18	 1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	 3	3	86
	3-15		1.40-1.70		0.12-0.17		0.5-1.0	.24	.24			
i	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	i	İ	i
į	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	ĺ	į	İ
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			[
371A:		 	 			 				 		
Croswell	0-1	2-10	1.35-1.65	6.00-20	0.06-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
I	1-7	0-10	1.30-1.50	6.00-20	0.06-0.11	0.0-2.9	0.5-2.0	.10	.10			
I	7-16		1.40-1.60		0.06-0.11	1	0.6-1.0	.10	.10			
	16-39		1.40-1.60		0.05-0.10	1	0.0-0.5	.02	.02	ļ		!
	39-60	0-5 	1.50-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02	 		
380B:		! 										
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
I	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17			
	31-36		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	ļ		
	36-60	1-6 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
Rosholt	0 - 8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
I	8-10	3-12	1.70-1.80	0.60-6.00	0.05-0.16	0.0-2.9	0.0-1.0	.24	.24			
I	10-14			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	,			
	14-28		1.65-1.75		0.06-0.19	1	0.0-0.5	.24	.24	ļ		!
	28-34		1.55-1.65		0.02-0.10	1	0.0-0.5	.10	.17			
	34-60	1-6 	1.55-1.80 	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	1.10	.15	 	 	1
380C:		 									İ	İ
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
ļ	3-15		1.40-1.70		0.12-0.17	1	0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17	ļ		!
ļ	31-36 36-60		1.50-1.80 1.55-1.80		0.02-0.10	1	0.0-0.5	1.17	17	 	1	1
i		- 0							123	ĺ	İ	İ
Rosholt	0 - 8	4-10	1.50-1.60	0.60-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	4	3	86
I	8-10		1.70-1.80		0.05-0.16	0.0-2.9	0.0-1.0	.24	.24			
	10-14			0.60-6.00	0.05-0.16	1	0.0-1.0	.24	,			
	14-28	'	1.65-1.75		0.06-0.19	1	0.0-0.5	.24	.24	ļ		
ļ	28-34 34-60		1.55-1.65 1.55-1.80		0.02-0.10	1	0.0-0.5	1.10	17	 	1	1
	31 00	10		0.00 20				.10	.13			i
380D:						!					!	[
Cress	0-3	'		0.60-2.00			0.5-2.0	.24		3	3	86
ļ	3-15 15-31	•	1.40-1.70 1.50-1.80	0.60-2.00	0.12-0.17		0.5-1.0	.24	.24			
	31-36		1.50-1.80 1.50-1.80		0.02-0.10		1	.17	1.17			1
ļ	36-60	'	1.55-1.80		0.01-0.07	1	0.0-0.5	1.10	.15			
į		İ	į į		İ	İ	İ	İ	į	İ	İ	į
Rosholt	0 - 8	'			0.12-0.14		1.0-3.0	.24	'	4	3	86
	8-10	'		0.60-6.00				.24	'	ļ		!
l l	10-14 14-28	'		0.60-6.00				.24	'			1
ļ	14-28 28-34	'		0.60-6.00 0.60-6.00				1.24	.24	l	 	I
	34-60	'	1.55-1.80		0.02-0.10			.10	'			
į			ļ			ļ	!			ļ	ļ	ļ
383B: Mahtomedi	0-5	215	 1.40-1.60	6 00 20	0.09-0.11		0.5-1.0		 .10	 5	2	134
*************************	0-5 5-8	'	1.40-1.60 1.40-1.50		0.09-0.11		1	1.10	1.10	3	4	1 134
i I	8-15	'	11.45-1.75		0.02-0.07			.05	'	i		İ
i	15-30	'	1.45-1.75		0.02-0.07			.05	1.10	i	İ	i
	30-60	'	1.45-1.75		0.02-0.07		0.0-0.5	.05	'	1	1	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	 Moist	Permea-	 Available	 Linear	 Organic	Erosi	on fac	tors	,	Wind erodi-
and soil name	 		bulk density	bility	water capacity	extensi-	matter	 Kw	 Kf	 m	bility	bility
	 In	Pct	g/cc	 In/hr	In/in	Pct	Pct	KW		-	group 	Index
		İ				į	İ			ĺ	İ	İ
383C: Mahtomedi	 0-5	2-15	1.40-1.60	 6 00-20	0.09-0.11	0.0-2.9	0.5-1.0	1.10	 .10	 5	 2	 134
Mancomear	5-8	1	1.40-1.50		0.02-0.07		0.0-0.5	1.10	1.10		-	131
	8-15		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10	i	İ	i
	15-30	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10	į	į	į
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			!
383D:	 					 						
Mahtomedi	0-5	2-15	1.40-1.60	6.00-20	0.09-0.11	0.0-2.9	0.5-1.0	.10	.10	5	2	134
	5-8	0-10	1.40-1.50	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.10	į	į	į
	8-15	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
	15-30		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			
	30-60	0-10	1.45-1.75	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.05	.10			
396B:	 		 			! 						
Friendship	0-4	2-6	1.50-1.65	6.00-20	0.06-0.08	0.0-2.9	0.5-2.0	.02	.02	5	1	220
	4-29	2-7	1.35-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
	29-60	0-4	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	ļ		
Wurtsmith	 0-6	0.10	 1.30-1.65	6 00 20	0.07-0.09		1.0-6.0	.02	.02	 5	 1	 220
wur csmich	6-33	1	1.40-1.60		0.06-0.07		0.0-0.5	1.15	.15]	-	220
	33-60	1	1.50-1.65		0.05-0.07		0.0-0.5	1.15	.15	i		
	j	į	İ	İ		į	İ	i	į	į	į	į
Grayling	0-3	1	1.30-1.65		0.07-0.09		1.0-6.0	.02	.02	5	1	220
	3-15		1.30-1.65		0.05-0.07		0.3-0.5	.15	.15			
	15-23		1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
397A:	 											
Perchlake	0-9	2-10	1.40-1.50	6.00-20	0.10-0.12	0.0-2.9	0.5-2.0	.10	.10	5	2	134
	9-18	2-8	1.50-1.70	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	ĺ
	18-42	1	1.40-1.65		0.05-0.10		0.0-0.5	.15	.15			
	42-46		1.50-1.70		0.11-0.19		0.0-0.5	.24	.24			
	46-60 	2-8 	1.50-1.65	6.00-20	0.05-0.09	0.0-2.9	0.0-0.5	.15	.15		 	
399B:	! 					İ		i	İ	i		İ
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15			
	15-23		1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
399C:	 											
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15			
	15-23	1	1.45-1.65		0.02-0.07		0.0-0.5	.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
399D:	 					 						
Grayling	0-3	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.02	.02	5	1	220
	3-15	0-10	1.30-1.65	6.00-20	0.05-0.07	0.0-2.9	0.3-0.5	.15	.15	į	į	į
	15-23		1.45-1.65		0.02-0.07	0.0-2.9	0.0-0.5	1.15	.15			
	23-60	0-10	1.45-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.15	.15			
405A:	 		 			 			 			
Lupton	0-65	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
-	ĺ	į	İ	İ		į	İ	İ	İ	į	İ	İ
Cathro	0-28	1		0.20-6.00	1		60-85	.02	.02	2	8	0
	28-49			0.20-2.00	'		0.0-0.5	.28	.28			
	49-60 	TO-30	1.50-1.70	0.20-2.00	0.11-0.22	U.U-2.9 	0.0-0.5	.28	.28	 	 	I I
Tawas	0-31	0-0	0.15-0.40	0.20-6.00	0.35-0.45		30-80	.02	.02	2	8	0
	31-60	,	1.55-1.80		0.02-0.10		0.0-0.5	.15	.15	İ	İ	İ
										İ	İ	İ

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay 	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	 	on fac		wind erodi- bility	
			density		capacity	bility		Kw	Kf	Т	group	index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct				[
106A:		 				 			 			
Loxley	0-13	 0-0	 0.30-0.40	6.00-20	0.45-0.55	 	70-90	.02	.02	 3	 8	l 0
	13-60	1			0.35-0.45		70-90	.02	.02	İ		
į		j	i i		İ	į	į	į	į	İ	į	j
07A:					İ	<u> </u>	!		ļ		[
Seelyeville	0-80	0-0	0.10-0.25	0.20-6.00	0.35-0.45		25-99	.02	.02	3	8	0
 Markev	0-32	 0-0	 0 15-0 45	0.20-6.00	0 35-0 45	 	55-85	.02	 .02	 2	 8	 0
	32-60	1	1.40-1.65		0.03-0.10	1	0.0-0.5	.10	.15	i -		
į		İ	į į		İ	İ	Ì	į	j	ĺ	į	j
10A:					İ	<u> </u>	!		ļ		[
Seelyeville	0-80	0-0	0.10-0.25	0.20-6.00	0.35-0.45		25-99	.02	.02	3	8	0
 Cathro	0-28	 0-0	 0 28-0 45	0.20-6.00	0.35-0.45	 	 60-85	.02	 .02	 2	 8	 0
	28-49	!			0.11-0.22	1	0.0-0.5	.28	.28	. <i>-</i>		
i	49-60	10-30	1.50-1.70	0.20-2.00	0.11-0.22	0.0-2.9	0.0-0.5	.28	.28	i	į	j
İ		ļ	ļ İ		ļ	!	ļ				ļ	
12A: Rifle										_	_	
Rifle	0-4 4-60	1			0.55-0.65	1	70-90 70-90	.02	.02	5	7	38
	1-00	0-0		2.00-0.00		 	70-30	.02	.02		 	
Tacoosh	0-8	0-0	0.10-0.30	0.20-6.00	0.35-0.45		75-99	.02	.02	2	8	0
	8-40	0 - 0	0.10-0.20	0.60-6.00	0.45-0.55		75-99	.02	.02			
	40-42	1			0.11-0.19		0.5-1.0	.24	.24			
	42-60	10-18	1.50-1.70	0.60-2.00	0.11-0.19	0.0-2.9	0.5-1.0	.24	.24			
15A:		 	 			 	 	l I	 	l I	 	
Greenwood	0-60	0-0	 0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	 3	8	0
j		j	j j		İ	İ	Ì	İ	İ	ĺ	į	İ
39B:												
Graycalm	0-3	!	1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10	5	2	134
	3-22 22-35	!	1.25-1.60 1.50-1.65		0.05-0.10		0.0-0.5	1.10	.15 .15	l I	 	
	35-60	!	1.50-1.65		0.05-0.10		0.0-0.5	.10	.15	i	! 	İ
İ		İ	į į		İ	İ	Ì	į	j	ĺ	į	j
Menahga	0-1	!	0.15-0.30		0.55-0.65		65-85	.02	.02	5	2	134
	1-2	!	1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10			
	2-25 25-80		1.25-1.60 1.50-1.65		0.05-0.10	1	0.0-0.5	.10	.15 .15	l I	 	
	25 00	0 10	1.50 1.05	0.00 20		0.0 2.5		.10	.13	i		
39C:		İ	j j		j	İ	į	i	į	i	į	j
Graycalm	0-3	1	1.30-1.55		0.09-0.11	1	0.5-2.0	.10	.10	5	2	134
	3-22	!	1.25-1.60		0.05-0.10	1	0.0-0.5	1.10	.15			
	22-35 35-60		1.50-1.65 1.50-1.65		0.05-0.10		0.0-0.5	1.10	.15 .15		 	l I
	33-00	0-15	1.30-1.05	0.00-20		0.0-2.5	0.0-0.5	.10	.13		 	
Menahga	0-1	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	5	2	134
	1-2		1.30-1.55		0.09-0.11		0.5-2.0	.10	.10			
	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15			
	25-80	0-10	1.50-1.65	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15			
39D:		 	 			 	 	l I	 	l I	 	
Graycalm	0-3	2-10	 1.30-1.55	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	5	2	134
j	3-22		1.25-1.60		0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
	22-35		1.50-1.65		0.05-0.10		0.0-0.5	.10	.15			
	35-60	0-15	1.50-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15			
 Menahqa	0-1	 0-0	 0.15-0.30	6.00-20	0.55-0.65	 	65-85	.02	.02	 5	 2	134
	1-2		1.30-1.55		0.09-0.11		0.5-2.0	1.10	.10	ĺ	 i	
i	2-25		1.25-1.60		0.05-0.10		0.0-0.5	.10	.15	İ	į	į
			1.50-1.65			0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	Erosi	on fac	cors	Wind erodi- bility	
and soil name			density	 prrrch	capacity	bility	marter	Kw	 Kf	T	group	
<u> </u>	In	Pct	g/cc	In/hr	In/in	Pct	Pct			<u></u>		
İ		İ			İ		ĺ	ĺ	ĺ		ĺ	
141C:	0.4											
Freeon	0-4 4-19	1	1	0.60-2.00	1		1.0-3.0	.37	.37 .43	4	8	0
	19-39	1	1		0.18-0.22		0.0-0.5	.28	.28	l I	 	
	39-53	1	1	0.06-0.60	1		0.0-0.5	.28	.28	 	 	l I
	53-80	1	1		0.08-0.18		0.0-0.5	.28	.28		İ	İ
Cathro	0-28	1	1	0.20-6.00	1		60-85	.28	 .28	2	2	134
	28-49 49-60	1	1	0.20-2.00	0.11-0.22		0.0-0.5	.28	.28	 	 	
142C:												
Haugen	0-4	1	1	0.60-2.00	1		1.0-3.0	.24	.24	5	3	86
	4-15 15-23	1	1	0.60-2.00	0.08-0.19		0.5-1.0	.24	.24	 		
	23-35	1		0.60-2.00	1		0.0-0.5	.24	.24	l I	 	l I
l	35-49	1		0.20-0.60	1		0.0-0.5	.24	.24	 	 	
	49-79	1	1		0.05-0.13		0.0-0.5	.24	.24	İ		i
į	79-80	1	1	0.01-0.06	1		0.0-0.5	.24	.24	İ	İ	İ
Greenwood	0-6 6-60		0.30-0.40		0.55-0.65		55-75 55-75	.02	.02	3	7	38
	6-60	0-0	0.10-0.25	0.60-6.00	0.45-0.55	 	55-75	.02	.02	l I	 	
143D:							İ	İ		İ		
Amery	0-3	1		0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
	3-22	1			0.09-0.19		0.0-0.5	.24	.24			
	22-34	1	1	0.20-0.60	1		0.0-0.5	.24	.24			
	34-41	1	1		0.07-0.16		0.0-0.5	.24	.24			
	41-57 57-71	1	1	0.20-0.60	0.07-0.16		0.0-0.5	.20	.28 .28	 		
l	71-80		1		0.07-0.16		0.0-0.5	.28	.28	 	 	
							İ	İ		İ	İ	İ
Greenwood	0 - 6	0 - 0	0.30-0.40	6.00-20	0.55-0.65		55-75	.02	.02	3	7	38
	6-60	0-0	0.10-0.25	0.60-6.00	0.45-0.55		55-75	.02	.02			
461A:		 	 			 	l I	1	 	 	 	
Bowstring	0-38	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	3	8	0
	38-47	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.10	.15	i	į	İ
į	47-80	0-0	0.10-0.35	0.20-6.00	0.35-0.45		70-90	.02	.02	İ	į	į
484A:			 			 -		l i	 			l I
Greenwood	0-6	0-0	0.30-0.40	 6.00-20	0.55-0.65	 	55-75	.02	.02	 3	 7	38
	6-60	1	1	0.60-6.00	1		55-75	.02	'			
							ļ				[
Beseman	0-36	1		0.60-6.00			25-75		.02	2	8	0
	36-60	8-20	1.35-1.60	0.20-0.60	0.09-0.22	0.0-2.9 	0.5-1.0	.43	.43	l I	 	l I
195B:							İ	İ		İ		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
İ	9-28	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9			.15			
	28-48	,			0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	48-80	1-5	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
 Grettum	0-3	2-12	 1.35-1.60	 6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	1.10	 .10	 5	 2	134
	3-32		1.40-1.65		0.05-0.11				.15	i	, -	
I I		1	1		'	0.0-2.9		.15	.15	i	1	1
1	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	. TO				

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	Erosi	on fac	tors	,	Wind erodi-
and soll name		 	density	DITICY	capacity		Maccer	Kw	 Kf	 T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	İ		<u> </u>		
4055												ļ
495B: Perida	0-9	 6-8	 1.35-1.65	6 00-20	0.09-0.11	 n n_2 q	0.5-2.0	1.10	1.10	 4	2	134
rerida	9-43		1.45-1.65		0.05-0.10		0.0-0.5	1.15	1.15	* 	4	134
	43-45		1.45-1.65		0.05-0.10		0.0-0.5	.15	1	İ		İ
İ	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	į	į	į
	60-74			0.01-0.06	1		0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
495C:		 	 		 	 				 		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
j	9-28	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	İ
	28-48			0.01-0.20	•		0.0-0.5	.28	.28			
	48-80	1-5	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
Grettum	0-3	 2-12	 1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	1 .10	 5	2	134
i	3-32		1.40-1.65		0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	İ	i
İ	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	į	į
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			ļ
Perida	0-9	 6-8	 1.35-1.65	6 00-20	0.09-0.11	 0 0-2 9	0.5-2.0	1.10	 .10	 4	 2	134
101100	9-43		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15	i -	-	
	43-45	'	1.45-1.65		0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	İ	i
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	į	İ	į
	60-74	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
495D:		 	 			 				 		
Karlsborg	0 - 9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
	9-28		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15			
	28-48			0.01-0.20	•	•	0.0-0.5	.28	.28	!		!
	48-80	1-5 	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
Grettum	0-3	2-12	 1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	 5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	į	İ	į
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10		0.0-0.5	.15	.15			
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
Perida	0-9	 6-8	 1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	1.10	 .10	 4	2	134
	9-43		1.45-1.65		0.05-0.10		0.0-0.5	.15	.15	i -	i -	
	43-45	2-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	į	İ	į
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28			
	60-74				0.08-0.10		0.0-0.5	.28	.28			
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
497A:		 				 				 		
Meenon	0 - 9	6-8	1.35-1.65	2.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	1	250
	9-28	1-7	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
	28-41	'		0.01-0.06	•			.28				
	41-80	1-7	1.55-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	 		
515A:			 			! 						
Manitowish	0 - 3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	3 - 4			0.60-6.00	1		1	.24	1			
	4-16			0.60-6.00	1		1	.24	1			ļ
	16-19		1.45-1.65		0.04-0.12		1	.15	!			
	19-60	0-5	1.55-1.80	0.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	 Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	
and soil name		 	bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i	İ	i i		Ī
i		İ]		į ,		ĺ	i	i	ĺ	İ	İ
521A:		į			j	İ	İ	į	į	j	į	j
Dody	0-3	0 - 0	0.45-0.85	2.00-6.00	0.35-0.45		20-50	.02	.02	4	8	0
I	3 - 9	1-12	1.35-1.60	2.00-6.00	0.06-0.08	0.0-2.9	0.2-1.0	.02	.02			
I	9-20			2.00-6.00	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
	20-23			2.00-6.00	0.05-0.10		0.0-0.5	1.15	.15			
	23-47			0.01-0.20	0.08-0.12		0.0-0.5	.28	.28			
	47-58	1	1.40-1.65		0.05-0.10		0.0-0.5	.15	.15	ļ		
	58-80	0-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ļ		ļ
524E:								1				
Rock outcrop.												
Frogcreek	0-4			0.60-2.00			2.0-4.0	.37	 .37	 5	 5	 56
rrogcreek	4-13		1.45-1.65		0.20-0.22		1.0-2.0	37	37	5	5	56
ļ	13-19				0.20-0.22		0.0-0.5	.20	.28		 	
	19-32			0.20-0.60	0.07-0.20		0.0-0.5	.20	.28		 	
ļ	32-46				0.07-0.19		0.0-0.5	.20	.28	l I	 	1
ļ.	46-80			0.06-0.20	0.02-0.05		0.0-0.5	1.10	1.17	i i	 	
ļ	10-00	2-10		3.00-0.20			0.0-0.5	.10	,	i	! 	İ
Metonga	0-3	5-12	1.35-1.45	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	2	3	86
	3-4			0.60-2.00	0.17-0.22		0.5-1.0	.37	.37	i -		
i	4-25		1.40-1.70		0.17-0.22		0.0-0.5	.37	.37	i		i
i	25-28			0.60-2.00	0.07-0.16		0.0-0.5	.24	.24	i	İ	İ
i	28-80	0-0		0.01-20	0.00-0.00	i	i	i		İ	İ	i
į		į	İ		i	İ	İ	į	İ	İ	İ	İ
542B:		İ			İ		ĺ	İ	ĺ	ĺ	İ	ĺ
Haugen, very stony	0 - 4	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
I	4-15	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
I	15-23	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
I	23-35			0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24			
	35-49				0.05-0.13		0.0-0.5	.24	.24			
	49-79			0.20-0.60	0.05-0.13		0.0-0.5	.24	.24			
	79-80	6-15	1.80-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24	ļ		
!												
Haugen	0 - 7		1.40-1.65		0.12-0.14		1.0-3.0	.24	.24	5	3	86
!	7-15		1.40-1.70		0.08-0.19		0.5-1.0	.24	.24	ļ		ļ
	15-23			0.60-2.00	0.08-0.19		0.5-1.0	.24	.24			
l l	23-35			0.60-2.00	0.05-0.16		0.0-0.5	.24	.24			
l I	35-49 49-79			0.20-0.60	0.05-0.13		0.0-0.5	.24	.24			
	79-80			0.01-0.06	1		0.0-0.5	.24	.24		 	
· ·	79-60	0-13	1.60-1.90	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.24	.24	l I	 	l I
542C:		 	 			 			 	 	 	
Haugen, very stony	0-4	 6-14	 1 40-1 65	0.60-2.00	0 12-0 14	 0 0-2 9	1.0-3.0	.24	.24	 5	3	86
naugen, very been,	4-15		•	0.60-2.00	•	•	0.5-1.0	.24	.24		3	00
i	15-23			0.60-2.00			0.5-1.0	.24	.24	i		i
i	23-35		•	0.60-2.00	•	•	0.0-0.5	.24	.24	i		i
i	35-49		•	0.20-0.60	•	•	0.0-0.5	.24	.24	i	İ	i
i	49-79			0.20-0.60			0.0-0.5	.24	.24	İ	İ	i
i	79-80			0.01-0.06	1		0.0-0.5	.24	.24	İ	İ	İ
i		i	İ		i		i	i	i	İ	İ	İ
Haugen	0 - 7	6-14	1.40-1.65	0.60-2.00	0.12-0.14	0.0-2.9	1.0-3.0	.24	.24	5	3	86
į	7-15	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
į	15-23	4-14	1.40-1.70	0.60-2.00	0.08-0.19	0.0-2.9	0.5-1.0	.24	.24			
İ	23-35	5-15	1.40-1.70	0.60-2.00	0.05-0.16	0.0-2.9	0.0-0.5	.24	.24			
İ	35-49			0.20-0.60			0.0-0.5	.24	.24			
	40 50	0 10	1 40-1 70	0.20-0.60	0 05-0 13	0 0-2 9	0.0-0.5	.24	.24	I .	I	I
4 7	49-79			0.01-0.06	1		0.0-0.5	.27	.21	1		1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	 Moist	Permea-	Available		 Organic	Erosi	on fac	tors	erodi-	Wind erodi-
and soil name		 	bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
543B:		 										
Anigon	0-10	 10-20	 1 25-1 45	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	 .37	 4	 5	56
111119011	10-14		1.35-1.55		0.20-0.22		0.5-1.0	.43	.43	-		30
i	14-20		1.50-1.60		0.20-0.22		0.0-0.5	.43	.43	i	İ	i
i	20-30	18-27	1.50-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.43	.43	i	İ	i
j	30-34	6-20	1.55-1.75	6.00-20	0.07-0.19	0.0-2.9	0.0-0.5	.24	.24	İ	į	į
	34-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			[
543C2:		 i										
Anigon	0-10	 10-20	 1 25_1 45	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	 .37	 4	 5	56
Alligoli	10-14			0.60-2.00	0.20-0.22		0.5-1.0	.43	.43	**	5	56
,	14-20			0.60-2.00	0.20-0.22		0.0-0.5	.43	.43	 	1	
ļ	20-30				0.20-0.22		0.0-0.5	.43	.43	i	i	i
i	30-34		1.55-1.75		0.07-0.19		0.0-0.5	.24	.24	i	İ	i
	34-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	į	į
								-				-
544F:	0-1	 0-0	 0.15-0.30	6 00-20	0.55-0.65		 65-85	.02	 .02	 5	2	134
menanga	1-2		1.40-1.65		0.06-0.08		0.5-2.0	.02	.02]	4	134
,	2-25		1.25-1.60		0.05-0.10		0.0-0.5	1.10	1.15	 	 	1
	25-80		1.50-1.65		0.02-0.07		0.0-0.5	.10	.15	İ		İ
							[1				[
Mahtomedi	0-5		1.40-1.60		0.09-0.11		0.5-1.0	.10	.10	5	2	134
l l	5-8		1.40-1.50		0.02-0.07		0.0-0.5	.10	.10	ļ	ļ	!
ļ ,	8-15 15-30		1.45-1.75		0.02-0.07		0.0-0.5	.05	.10			-
	30-60		1.45-1.75 1.45-1.75		0.02-0.07		0.0-0.5	.05	.10 .10	 		
		0 20		0.00 =0								İ
555A:					[[1				
Fordum	0-6			0.60-2.00	0.17-0.24		4.0-12	.32	.32	4	5	56
	6-18			0.60-6.00	0.10-0.22		1.0-12	.37	.37			!
l l	18-30		1.40-1.50		0.10-0.22		1.0-12	.37	.37			
	30-60	2-5	1.55-1.70	6.00-20	0.04-0.10	0.0-2.9	0.5-1.0	.15	.15	 	 	1
574B:		! 					i	i				i
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10			
	4-7		1.35-1.65		0.03-0.11	0.0-2.9	1.0-2.0	.10	.10			
	7-14		1.35-1.65		0.03-0.11		1.0-2.0	.02	.02			
l l	14-22		1.45-1.70		0.03-0.11		0.0-0.5	.02	.02	ļ	ļ	!
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
574C:		 	 				i İ		 			
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
ļ.	2-4	0-10	1.35-1.55	2.00-20	0.04-0.11	0.0-2.9	0.5-1.0	.10	.10	ĺ	İ	İ
	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9	1.0-2.0	1.10	.10			
!	7-14		1.35-1.65		0.03-0.11	0.0-2.9	1.0-2.0	.02	.02			
	14-22		1.45-1.70		0.03-0.11			.02	.02			
	22-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
574E:		 	 		1		[[1	 	 	 	1
Sayner	0-2	2-10	1.25-1.45	2.00-6.00	0.08-0.12	0.0-2.9	1.0-3.0	.10	.10	5	2	134
i	2-4		1.35-1.55		0.04-0.11			.10	'	İ	İ	İ
i	4-7	0-10	1.35-1.65	2.00-20	0.03-0.11			.10	.10			
i	7-14	0-10	1.35-1.65	2.00-20	0.03-0.11	0.0-2.9		.02	.02			
i	14-22	0-10	1.45-1.70	2.00-20	0.03-0.11	0.0-2.9	0.0-0.5	.02	.02			
			1.55-1.80		0.01-0.07							

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	Moist	Permea-	 Available	1	 Organic	Erosi	on fac	tors	erodi-	Wind erodi-
and soil name	 	 	bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	bility index
	l In	Pct	g/cc	In/hr	In/in	Pct	Pct	i	İ	i		I
i		İ	j		į ,		ĺ	i	i	i	İ	i
579B:							[
Parkfalls	0-5	4-15	1.35-1.70	0.60-2.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	4	3	86
	5-8			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24			
	8-17			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24			!
	17-30			0.20-0.60	0.10-0.14		0.0-0.5	.20	.28			
	30-33 33-48			0.20-0.60	0.10-0.14		0.0-0.5	.20	.28			
	33-48 48-80		1.85-2.00	0.20-0.60	0.02-0.04		0.0-0.5	.28	.28		 	
	1 0-00	2-10	1.83-2.00	0.00-0.20	0.00-0.04	0.0-2.9	0.0-0.5	.20	.20		 	
600A:	 	 	 			l I	İ				 	
Haplosaprists										2	8	0
		İ	İ		i	İ	i	i	i	i		i
Psammaquents		i	i i					ļ		2	8	0
615B:												
Cress	0-3			0.60-2.00	0.12-0.14		0.5-2.0	.24	.24	3	3	86
	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24			
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	!		
	31-36		1.50-1.80		0.02-0.10	1	0.0-0.5	1.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
615C:	l I	 	 		1	l I	I I		 		 	
Cress	 0-3	 5_18	 1 25_1 60	0.60-2.00	0.12-0.14	0 0-2 9	0.5-2.0	.24	.24	3	3	86
Cless	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24	3	3	00
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	1.17	1.17	i	 	
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	1.17	1.17	i	 	
i	36-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i		i
i							İ			i	İ	i
615D:	İ	į	j i		İ	İ	İ	İ	İ	į	İ	İ
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
	3-15	5-18	1.40-1.70	0.60-2.00	0.12-0.17	0.0-2.9	0.5-1.0	.24	.24	İ	İ	į
	15-31	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	ĺ	İ	İ
	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17			
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
623A:							!	!		ļ		!
Capitola	0-5			2.00-6.00	0.35-0.45		50-80	.02	.02	4	8	0
	5-7			0.60-2.00	0.16-0.24		3.0-10	.37	.37	!		
	7-22			0.60-2.00	0.09-0.22		0.5-1.0	.43	.43			
	22-33			0.60-2.00 0.01-0.06	0.07-0.16		0.0-0.5	.28	.28			
	33-60	2-10	1.70-1.90	0.01-0.06	0.03-0.07	0.0-2.9	0.0-0.5	.28	.28		 	
624A:	 	 	 			 			 	 	 	
Ossmer	0-4	 8-15	 1 35-1 55	0.60-2.00	0 20-0 24	0 0-2 9	2.0-3.0	.37	.37	4	 5	56
OBBINCI	4-6			0.60-2.00			0.0-1.0	.37	.37	-	3	30
j	6-11			0.60-2.00			0.0-0.5	.37	.37	i		
	11-26			0.60-2.00					.37	i	İ	i
	26-34			0.60-2.00				.32	.32	i	İ	i
i	34-38			0.60-2.00				1	.32	i	į	i
j	38-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	į	į	į
İ			l i									
632A:												
Aftad	0-10			0.60-2.00			1.0-3.0	.28	.28	5	3	86
	10-29			0.60-2.00				.43	.43			
	29-36			0.60-2.00					.43			[
	36-41			0.60-2.00				.43	.43			
	41-60	5-12	1.50-1.70	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	.24	ļ		!

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	Clay	 Moist bulk	Permea- bility	Available water	 Linear extensi-	 Organic matter		on fac		wind erodi- bility	
			density	DILLEY	capacity	bility	Maccel	Kw	Kf	 т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		1	<u> </u>		
į		į	İ		İ	j	j	İ	į	İ	į	İ
332B:					İ	<u> </u>	<u> </u>				[
Aftad	0-10				0.14-0.18		1.0-3.0	.28	.28	5	3	86
ļ	10-29			0.60-2.00	0.09-0.19		0.5-1.0	.43	.43			
	29-36 36-41			0.60-2.00 0.60-2.00	0.10-0.19		0.0-0.5	.43	.43	 	 	
ļ	41-60				0.10-0.19		0.0-0.5	.24	.24	l I	 	
i		0 ==								i	<u> </u>	i
332C:			İ		i	İ	İ	İ	i	İ	i	İ
Aftad	0-10	3-8	1.35-1.65	0.60-2.00	0.14-0.18	0.0-2.9	1.0-3.0	.28	.28	5	3	86
I	10-29	3-12	1.45-1.70	0.60-2.00	0.09-0.19	0.0-2.9	0.5-1.0	.43	.43			
I	29-36	6-14	1.50-1.70	0.60-2.00	0.10-0.19	0.0-2.9	0.0-0.5	.43	.43			
	36-41				0.10-0.19		1	.43	.43			!
	41-60	5-12	1.50-1.70	0.20-0.60	0.11-0.22	0.0-2.9	0.0-0.5	.24	.24			
								1				
633F: Pence	0-3	 3_1F	 1 30_1 70	2.00-6.00	0.11-0.15	0 0-2 0	1.0-3.0	.24	.24	 3	 3	 86
	3-8			0.60-6.00	0.11-0.13		0.5-1.0	.24	.24	3		80
ļ	8-15			0.60-6.00	'			1.17	.24	i		İ
	15-21		1.65-1.75		0.05-0.08		0.0-0.5	.05	.10	i	i	İ
İ	21-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	İ	į	į
İ					İ	ĺ	ĺ	Ì	ĺ	ĺ	ĺ	ĺ
Padus	0-2	3-15	1.35-1.70	0.60-2.00	•		1.0-3.0	.24	.24	4	3	56
I	2-3			0.60-2.00	0.09-0.19	1	0.5-1.0	.24	.24			
	3-19				0.09-0.19		1	.24	.24			!
	19-26			0.60-2.00	0.06-0.19		0.0-0.5	.24	.24	ļ		
ļ	26-38			0.60-2.00	'		1	.24	.24			
l l	38-60	U-5 	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 	 	
648B:			 			 	 		1	l I	 	
Sconsin	0-4	9-14	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-3.0	.37	.37	4	5	56
	4-5			0.60-2.00	0.20-0.22		0.5-1.0	.37	.37	i -		
į	5-10				0.20-0.22		0.5-1.0	.37	.37	i	i	İ
į	10-18	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37	İ	į	į
I	18-27	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37			
I	27-34			0.60-2.00	0.05-0.19		0.0-0.5	.32	.32			
	34-38			0.01-0.20	'		1	.24	.24	ļ		!
	38-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
(70G)								1				
670C: Keweenaw	0-2	 F-20	 1 35_1 60	2.00-6.00	0.09-0.14	0 0-2 9	1.0-2.0	.20	.20	 5	 3	 86
reweenaw	2-4			2.00-6.00	0.09-0.14		0.5-1.0	1.17	.24]	3	86
i	4-16			2.00-6.00	'			.17	.24	i I	 	l I
i	16-20			2.00-6.00			0.0-0.5	.17	.24	i	i	i
į	20-27	2-10	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24	i	į	į
İ	27-43	2-15	1.55-1.80	0.60-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24	ĺ	İ	ĺ
I	43-75	5-20	1.55-1.80	0.60-6.00	0.08-0.13	0.0-2.9	0.0-0.5	.17	.24			
ļ	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
					ļ							!
Pence	0-3			2.00-6.00				.24	.24	3	3	86
ļ	3-8			0.60-6.00								
	8-15 15-21			0.60-6.00	'			.17		 	 	
	15-21 21-60		1.65-1.75 1.55-1.80		0.05-0.08			.05	10	I I	 	
 	21-00	0-3	1.55-1.60	3.00-20		0.0-2.9	0.0-0.3	.10	.13	i	! 	!
570E:								i	İ	i		
Keweenaw	0-2	5-20	1.35-1.60	2.00-6.00	0.09-0.14	0.0-2.9	1.0-2.0	.20	.20	5	3	86
i	2-4			2.00-6.00						İ	İ	İ
į	4-16			2.00-6.00					.24			
į	16-20	2-10	1.55-1.80	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.24			
	20-27			0.60-6.00								
	27-43			0.60-6.00				.17	.24			
	43-75			0.60-6.00					.24			
	75-80	2-10	1.50-1.70	2.00-6.00	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17	1		

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	Moist	 Permea-	Available		Organic	Erosi	on fac	tors		Wind erodi-
and soil name		 	bulk density	bility 	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	-
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	İ		Ī		İ
670E:				 		 						
Pence	0-3	 3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	 3	 3	 86
	3-8			0.60-6.00	0.11-0.18		0.5-1.0	.24	.24]]	00
i	8-15			0.60-6.00	0.10-0.15		1.0-2.0	.17	.24	İ	İ	İ
İ	15-21	0-6	1.65-1.75	2.00-60	0.05-0.08	0.0-2.9	0.0-0.5	.05	.10	İ	İ	į
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			ļ
671B:		 	 	 		 			 	 	 	
Spoonerhill, stony	0-3	2-15	1.35-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	8	0
,	3-12			2.00-6.00	0.06-0.14		0.5-1.0	.17	.24		ĺ	İ
i	12-16	2-15	1.55-1.80	2.00-6.00	0.05-0.13	0.0-2.9	0.0-0.5	.17	.24	i	İ	į
İ	16-34	2-10	1.55-1.80	0.60-2.00	0.03-0.10	0.0-2.9	0.0-0.5	.17	.24	ĺ	ĺ	ĺ
I	34-46	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
Spoonerhill	0-3	 2-15	 1 35-1 70	2.00-6.00	0.12-0.14	 0.0-2.9	1.0-2.0	.20	.20	 5	 8	 0
bpoonermili	3-12			2.00-6.00	0.06-0.14		0.5-1.0	1.17	.24]	0	U
	12-16			2.00-6.00	0.05-0.13		0.0-0.5	.17	.24	i	! 	
i	16-34			0.60-2.00	0.03-0.10		0.0-0.5	.17	.24	İ	İ	İ
İ	34-46	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17	İ	j	į
I	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17			
680B:	0-1		0.15-0.40		0 35 0 45	 	30-80	.02	.02	 4	 3	 86
Stanberry, stony	1-3			0.60-2.00	0.35-0.45		0.5-2.0	.02	.02	4± 	3 	86
	3-19			0.60-2.00	0.12-0.22		0.5-2.0	.24	.24	l I	 	
	19-24			0.20-0.60	0.09-0.14		0.0-0.5	.20	.28	i I	 	
	24-32			0.20-0.60	0.09-0.14		0.0-0.5	.20	.28	i		İ
i	32-42	5-10	1.65-1.85	0.20-0.60	0.06-0.11		0.0-0.5	.20	.28	i	İ	İ
İ	42-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	ĺ	ĺ	ĺ
_												
Pence, stony	0-3			2.00-6.00	0.11-0.15		1.0-3.0	.24	.24	3	3	86
	3-8 8-15			0.60-6.00	0.11-0.18		0.5-1.0	1.17	.24	 	 	l I
	15-21		1.65-1.75	'	0.05-0.08		0.0-0.5	.05	1 .10	l I	 	
	21-60		1.55-1.80	'	0.01-0.07		0.0-0.5	.10	.15	i		İ
İ		į	İ	İ	İ	İ	İ	İ	į	İ	j	İ
683A:			!		İ							
Tipler	0-3			0.60-2.00	0.10-0.15		2.0-3.0	.24	.24	4	3	86
	3-5			0.60-2.00	0.08-0.19	!	0.5-1.0	.24	.24			
	5-19 19-26			0.60-2.00	0.09-0.19		1.0-2.0	.24	.24	 	 	l I
	26-33			'	0.06-0.19		0.0-0.5	.24	.24	l I	 	
	33-60	:	1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i		İ
İ		ĺ		İ	İ			Ì	ĺ	ĺ	ĺ	ĺ
706A:												
Winterfield	0-7		0.90-1.50		0.17-0.19			.37	.37	5	3	86
	7-60	U-10	1.55-1.65	6.00-20 	0.04-0.10	U.U-2.9 	0.0-0.5	1.10	.17	 	 	l I
Totagatic	0-4	5-15	1.30-1.55	6.00-20	0.15-0.17	0.0-2.9	1.0-2.0	.28	.28	 5	 3	86
-	4-8		1.40-1.65		0.05-0.15			.10	.15	i	į	İ
i	8-17	0-10	1.40-1.65	6.00-20	0.05-0.15			.10	.15	İ	İ	İ
İ	17-28	0-10	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-10	.10	.15			
I	28-46		1.40-1.65		0.05-0.10			.10	.15			
I	46-70		1.40-1.65		0.02-0.10		1	.10	.15			ļ.
	70-80	0-10	1.40-1.65	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.10	.15			
			[

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	 Depth 	 Clay 	 Moist bulk	Permea- bility	Available water	 Linear extensi-	Organic matter	Erosi	on fac	cors 		Wind erodi- bility
	İ		density		capacity	bility		Kw	Kf	т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
724A:	 					l I						
Rib	 0-7	 10-20	 1.25-1.35	0.60-2.00	0.22-0.28	0.0-2.9	3.0-10	.32	.32	 4	 5	 56
NID.	7-10				0.18-0.22	1	0.0-1.0	.43	.43	-	3	30
	10-32				0.18-0.22	1	0.5-1.0	.43	.43	İ	i	i
	32-35	5-25	1.45-1.75	0.60-2.00	0.10-0.19	0.0-2.9	0.0-0.5	.32	.32	į	į	į
	35-37	2-10	1.65-1.75	2.00-6.00	0.05-0.08	0.0-2.9	0.0-0.5	.10	.15			
	37-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Rock outcrop.	 	 				 			 	 		
726B:	 	 	 			 			 	 	 	
Sissabagama	0-10	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	10-31	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
	31-45	2-12	1.50-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.17	.17			
	45-80	5-15	1.50-1.65	0.20-0.60	0.05-0.20	0.0-2.9	0.0-0.5	.24	.24	 		
733A:	 		i i									
Wozny	0-3	0 - 0	0.15-0.35		0.35-0.45	1	50-80	.02	.02	5	8	0
	3-17				0.20-0.22		0.5-1.0	.32	.32			
	17-37				0.12-0.22	1	0.5-1.0	.43	.43			
	37-56				0.12-0.19	1	0.5-1.0	.24	.24			
	56-80 	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	1.10	.17	 	 	
771A:	İ	İ	i i		i	İ		İ	İ	İ	İ	İ
Lenroot	0-4		1.40-1.60		0.09-0.11	1	0.5-1.0	.10	.10	5	2	134
	4-8		1.45-1.75		0.02-0.10	1	0.0-0.5	.05	.10			!
	8-14		1.45-1.75		0.02-0.10	1	0.0-0.5	.05	.10			
	14-21 21-80		1.45-1.75 1.45-1.75		0.02-0.07	1	0.0-0.5	.05	.10 .10	 	 	
						İ		İ		İ	İ	İ
827A:												
Scoba	0-9 9-16				0.12-0.14	1	2.0-3.0	.24	.24	4	5	56
	16-20				0.07-0.19	1	0.0-0.5	.24	.34	l I	 	
	20-26				0.07-0.19	1	0.0-0.5	.24	.24	 	 	
	26-31				0.03-0.10	1	0.0-0.5	.17	.17	i		i
	31-60		1.55-1.80		0.01-0.07	1	0.0-0.5	.10	.15	İ	İ	
853C:	 -					 						
Frogcreek	0-4	5-12	 1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	 5	8	0
	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37	ĺ	İ	ĺ
	13-19				0.07-0.20	1	0.0-0.5	.20	.28			
	19-32			0.20-0.60			0.0-0.5	.20	.28			
	32-46			0.20-0.60			0.0-0.5	.20	.28			
	46-80 	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	1.10	.17	 	 	
Stinnett	0-4			0.60-2.00	•				.37	5	8	0
	4-7			0.60-2.00	•				.37			
	7-18			0.60-2.00					.37	ļ		!
	18-29			0.60-2.00		1		1	.37			
	29-34 34-41			0.20-0.60 0.20-0.60	•				.28 .28	l I	 	1
	41-55			0.20-0.60	•				1.17	I I	 	
	55-80			0.06-0.20	•			1.17	1 .17			
Mogny				2 00 6 00	0.35.0.45		 E0 00				 8	 0
Wozny	0-3 3-17			2.00-6.00 0.60-2.00	•		50-80	.02	.02	5 	8 	U
	17-37			0.60-2.00	•				.43	i		i
	37-56			0.20-0.60	•				.24	i	<u> </u>	i
	56-80			0.06-0.20	•			.10	.17	i	i	i
	I	i	i i		İ	į	į	i	i	İ	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay	 Moist bulk	Permea- bility	 Available water	 Linear extensi-	 Organic matter	Erosi	on fac	tors	Wind erodi- bility	
and soil name	<u> </u>	 	bulk density	DILLEY	water capacity	extensi- bility	matter	Kw	 Kf	 T	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	[[[Ţ.	[
56B:		 				l I						
oom: Stinnett	0-4	 5-12	 1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	 5	8	 0
	4-7	!		0.60-2.00	0.20-0.22	1	0.0-0.5	.37	.37			
i	7-18		1.40-1.65		0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	i	İ	i
İ	18-29	8-17	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	İ	į	į
I	29-34	6-16	1.65-1.85	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	34-41	7-18	1.65-1.85	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.28	.28			
	41-55	,	1.65-1.85		0.07-0.19	1	0.0-0.5	.10	.17			!
	55-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.17	.17	 		
57B:		 				 	 			 		
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
I	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37			
I	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28			
	19-32				0.07-0.19	1	0.0-0.5	.20	.28			
	32-46	!	1.65-1.85		0.07-0.19	1	0.0-0.5	.20	.28	ļ		!
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
57C:		 				 	 		 	 		
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
Ī	4-13	5-12	1.45-1.65	0.60-2.00	0.20-0.22	0.0-2.9	1.0-2.0	.37	.37	İ	į	į
I	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28			
I	19-32	7-18	1.65-1.85	0.20-0.60	0.07-0.19	1	0.0-0.5	.20	.28			
	32-46	!	1.65-1.85		0.07-0.19		0.0-0.5	.20	.28			
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17			
/3B:		 				 	 		 	 		
Stanberry	0-1	0-0	0.15-0.40	6.00-20	0.35-0.45	i	30-80	.02	.02	4	3	86
I	1-3	5-12	1.35-1.70	0.60-2.00	0.12-0.22	0.0-2.9	0.5-2.0	.24	.24			
I	3-19	6-14	1.35-1.70	0.60-2.00	0.09-0.19	0.0-2.9	0.5-2.0	.24	.24			
	19-24	!		0.20-0.60	0.09-0.14	1	0.0-0.5	.20	.28			
	24-32	!	1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28	ļ		!
	32-42		1.65-1.85		0.06-0.11	1	0.0-0.5	.20	.28			
	42-80	2-10 	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.28	.28	 		
73C:		İ	i i			İ	İ					i
Stanberry	0-1	0 - 0	0.15-0.40	6.00-20	0.35-0.45		30-80	.02	.02	4	3	86
	1-3				0.12-0.22	1	0.5-2.0	.24	.24			
	3-19			0.60-2.00	0.09-0.19	1	0.5-2.0	.24	.24			
	19-24		1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28			
	24-32 32-42		1.65-1.85 1.65-1.85		0.09-0.14	1	0.0-0.5	.20	.28 .28	 		
	42-80				0.00-0.11	1	0.0-0.5	.28	.28	 		
	12 00			0100 0120						İ		i
73D:		ĺ	į į				ĺ	İ	ĺ	ĺ		ĺ
Stanberry	0-1		0.15-0.40		0.35-0.45	1	30-80	.02	.02	4	3	86
	1-3			0.60-2.00				1	.24	ļ		!
	3-19	,			0.09-0.19	1	1	1	.24			
	19-24 24-32	!			0.09-0.14			1	.28 .28			
	32-42				0.09-0.14			1	.28	l I	1	1
	42-80				0.02-0.05	1	1	1	.28	 		
į		İ	i i		İ	İ	İ	İ	İ	İ	İ	i
05A:												
Cublake	0-3	!	1.40-1.65		0.09-0.11			1.10	17	5	1	220
	3-4 4-23		1.35-1.65 1.40-1.70		0.05-0.10				.17 .17	I I	 	I I
	23-32		1.45-1.70		0.05-0.10				.17	I I		
	32-40		1.45-1.70		0.05-0.10				1.15			1
	40-48		11.45-1.70		0.05-0.10				1.15	i		i
	48-60				0.17-0.22			.32	.32	i	İ	i
		i	i		i	i	i	i	i	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	 Clay	Moist	Permea-	Available		Organic	Erosi	on fac	Lors	erodi-	Wind erodi
and soil name		 	bulk density	bility	water capacity	extensi- bility	matter	Kw	 Kf	 T	bility group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct	i i		i		Ī
İ		İ			i		İ	į	İ	į	İ	į
926A:												
Flink	0-3	1	1.40-1.65		0.09-0.11		0.5-2.0	.10	.10	5	1	220
	3-6 6-9	1	1.35-1.60 1.35-1.65		0.05-0.07		0.0-0.5	1.15	.15 .15			
	9-26	1	1.35-1.65 1.35-1.65		0.05-0.10		0.0-0.5	1.15	.15	l I	 	l I
	26-35	1	1.40-1.70		0.05-0.10		0.0-0.5	1.15	1 .15	 		İ
	35-46		1.40-1.70		0.05-0.10		0.0-0.5	.15	.15	i	İ	İ
İ	46-52	10-35	1.40-1.80	0.20-2.00	0.18-0.22	0.0-2.9	0.0-0.5	.32	.32	İ	į	İ
	52-80	5-35	1.40-1.80	0.20-2.00	0.05-0.22	0.0-2.9	0.0-0.5	.32	.32			
0.4.3.5												
943D: Stanberry	0-1	 0-0	 0.15-0.40	6 00-20	0.35-0.45	 	30-80	.02	 .02	 4	3	 86
Scamperry	1-3	1		0.60-2.00	1		0.5-2.0	.24	.24	=	3	80
i	3-19	1		0.60-2.00	0.09-0.19		0.5-2.0	.24	.24	İ		i
i	19-24	1			0.09-0.14		0.0-0.5	.20	.28	İ	İ	i
	24-32	9-17	1.65-1.85	0.20-0.60	0.09-0.14	0.0-2.9	0.0-0.5	.20	.28	į	İ	į
j	32-42	5-10	1.65-1.85	0.20-0.60	0.06-0.11	0.0-2.9	0.0-0.5	.20	.28	ĺ	İ	ĺ
	42-80	2-10	1.85-2.00	0.06-0.20	0.00-0.04	0.0-2.9	0.0-0.5	.28	.28			ļ
3	0.6			2.00-6.00								
Greenwood	0-6 6-60		0.30-0.40 0.10-0.25		0.55-0.65	 	55-75 55-75		 	3	7	38
	0-60	0-0 	0.10-0.25 	0.80-2.00	0.45-0.55	 	55-75		 	 	 	1
948A:		! 			i	! 		i	İ	i		i
Billyboy	0 - 4	9-14	1.35-1.55	0.60-2.00	0.20-0.24	0.0-2.9	2.0-3.0	.37	.37	4	5	56
	4-11	5-14	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37	İ	į	į
	11-20	5-15	1.40-1.60	0.60-2.00	0.20-0.22	0.0-2.9	0.5-1.0	.37	.37			
	20-26	6-17	1.50-1.70	0.60-2.00	0.11-0.19	0.0-2.9	0.0-0.5	.24	.28			
	26-30			0.60-2.00	1		0.0-0.5	.20	.24			
	30-35		1.45-1.65		0.05-0.10		0.0-0.5	.10	.15			
	35-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	 		
970C:		 	 			 		1	 	l I		
Keweenaw	0-2	5-20	1.35-1.60	2.00-6.00	0.09-0.14	0.0-2.9	1.0-2.0	.20	.20	5	8	0
	2-4	5-15	1.45-1.80	2.00-6.00	0.09-0.14	0.0-2.9	0.5-1.0	.17	.24			
	4-16	1		2.00-6.00	1		0.0-0.5	.17	.24			
	16-20	1		2.00-6.00	1		0.0-0.5	.17	.24			
	20-27	1		0.60-6.00	1		0.0-0.5	.17	.24	ļ		!
	27-43			0.60-6.00	1		0.0-0.5	.17	.24			
	43-75 75-80			2.00-6.00	0.08-0.13		0.0-0.5	17	.24 .17	 		
	75-60	2-10	1.50-1.70	2.00-8.00	0.05-0.10	0.0-2.9	0.0-0.5	•1/	•1/	l I	 	1
Pence	0-3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
j	3-8	3-13	1.35-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.5-1.0	.24	.24	ĺ	İ	İ
	8-15	5-15	1.35-1.45	0.60-6.00	0.10-0.15	0.0-2.9	1.0-2.0	.17	.24			
	15-21	1	1.65-1.75		0.05-0.08		1	.05	'			
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Greenwood	0-6	 0-0	 0.30-0.40	6 00-20	0.55-0.65	 	 55-75		 	2	 7	38
Greenwood	6-60			0.60-6.00			55-75			3	<i>'</i>	30
								i	İ	İ		İ
970E:		į	j i		j	İ	į	į	į	i	į	į
Keweenaw	0-2	1		2.00-6.00	1		1	1	.20	5	8	0
	2-4	!		2.00-6.00	1		1	1	.24			ļ
	4-16			2.00-6.00	'				'			ļ
	16-20			2.00-6.00	'				'			ļ
	20-27			0.60-6.00	'				'			
	27-43 43-75			0.60-6.00	'				'	I I	 	I
	43-75 75-80			0.60-6.00 2.00-6.00					.24 .17	I I	 	I I
	,5-00		1	2.00-0.00	13.03-0.10	0.0-2.3	0.0-0.5	/	/	1	!	1

Table 24.--Physical Properties of the Soils--Continued

Map symbol	 Depth	 Clay	 Moist	Permea-	Available		Organic	Erosi	on fac	tors	erodi-	Wind erodi
and soil name	 		bulk density	bility	water	extensi- bility	matter	 K+.+	 Kf	 m-	bility group	
	 In	 Pct	density g/cc	 In/hr	capacity In/in	Pct	Pct	Kw	11	l T	group	Tugex
	 TU	PCT 	9/66 	111/NT	111/111	PCE 	PCE 		 	 	 	
970E:	İ	İ	İ		İ	İ	İ	ì	i	i	İ	İ
Pence	0-3	3-15	1.30-1.70	2.00-6.00	0.11-0.15	0.0-2.9	1.0-3.0	.24	.24	3	3	86
	3-8	3-13	1.35-1.65	0.60-6.00	0.11-0.18	0.0-2.9	0.5-1.0	.24	.24			
	8-15			0.60-6.00	0.10-0.15	1	1.0-2.0	.17	.24			
	15-21	1	1.65-1.75		0.05-0.08		0.0-0.5	.05	.10	ļ		
	21-60	0-5	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15			
Greenwood	 0-6	0-0	0.30-0.40	 6.00-20	0.55-0.65	 	55-75			3	 7	38
	6-60	1	0.10-0.25		0.45-0.55		55-75	i		i	İ	İ
	į	į	İ	İ	j	İ	İ	į	į	į	į	İ
1070C:						[[
Fremstadt	0-5		1.35-1.60		0.12-0.14	1	1.0-2.0	.20	.20	5	8	0
	5-33	1	1.45-1.80		0.08-0.11	1	0.6-1.0	.15	.17	ļ		
	33-37		1.50-1.80		0.05-0.11		0.0-0.5	.15	.17	ļ		
	37-45	1	1.50-1.80		0.05-0.11		0.0-0.5	.15	.17			
	45-70	1	1.50-1.70		0.04-0.10	1	0.0-0.5	.15	.17			
	70-80	2-10	1.50-1.70	2.00-6.00	0.04-0.10	0.0-2.9	0.0-0.5	.15	.17			
Cress	0-3	 5-18	 1 25-1 60	 0.60-2.00	0.12-0.14	0 0-2 9	0.5-2.0	.24	.24	 3	3	 86
Clebb	3-15	1	1	0.60-2.00	0.12-0.17		0.5-1.0	.24	.24]	3	00
	15-31	1	1.50-1.80		0.02-0.10	1	0.0-0.5	.17	.17		 	İ
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	i		i
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	İ	İ	İ
	ĺ	İ	ĺ		İ	ĺ	ĺ	İ	ĺ	ĺ	İ	
1070D:												
Fremstadt	0-5		1.35-1.60		0.12-0.14	1	1.0-2.0	.20	.20	5	8	0
	5-33	1	1.45-1.80		0.08-0.11	1	0.6-1.0	.15	.17	ļ		
	33-37		1.50-1.80		0.05-0.11		0.0-0.5	.15	.17	ļ		ļ
	37-45	1	1.50-1.80		0.05-0.11	1	0.0-0.5	.15	.17			
	45-70 70-80	,	1.50-1.70	2.00-20	0.04-0.10	1	0.0-0.5	1.15	.17 .17			
	70-80 	2-10	1.50-1.70	2.00-6.00	0.04-0.10	0.0-2.9	0.0-0.5	.15	.1/	l I	 	l I
Cress	0-3	5-18	1.25-1.60	0.60-2.00	0.12-0.14	0.0-2.9	0.5-2.0	.24	.24	3	3	86
	3-15			0.60-2.00	0.12-0.17		0.5-1.0	.24	.24	i		İ
	15-31		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	İ	İ	İ
	31-36	0-8	1.50-1.80	6.00-20	0.02-0.10	0.0-2.9	0.0-0.5	.17	.17	İ	İ	İ
	36-60	1-6	1.55-1.80	6.00-20	0.01-0.07	0.0-2.9	0.0-0.5	.10	.15	ĺ	İ	ĺ
			!		!			ļ				
1080B:												
Spoonerhill	0-3 3-12	,		2.00-6.00	0.12-0.14		1.0-2.0	.24	.24	5	8	0
	12-16	1	1	2.00-6.00	0.05-0.14	1	0.0-0.5	1 .17	.24	 	 	l I
	16-34	1	1	0.60-2.00	1	1	0.0-0.5	1.17	.24	l I	 	l I
	34-46	1	1	0.20-0.60	1	1		1	1.17		 	l I
	46-80			0.20-0.60			0.0-0.5	.17	.17	i		i
	j	į	İ	İ	j	İ	İ	į	į	į	į	j
Spoonerhill, stony	0-3	2-15	1.35-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-2.0	.24	.24	5	8	0
	3-12	,		2.00-6.00	,			.17	.24			
	12-16			2.00-6.00			0.0-0.5	.17	.24			
	16-34			0.60-2.00	•			.17	.24			
	34-46			0.20-0.60	•		0.0-0.5	.17	17			
	46-80	2-10	1.80-1.85	0.20-0.60	0.03-0.10	0.0-2.9	0.0-0.5	.17	.17	1		
Cress	0-3	 5-19	 1.25-1 60	0.60-2.00	0.12-0 14	0.0-2 9	0.5-2.0	.24	.24	 3	 3	 86
	3-15			0.60-2.00	0.12-0.14		0.5-1.0	.24	.24		3	00
	15-31		1.50-1.80		0.02-0.10			1.17	1.17	i		i
	31-36		1.50-1.80		0.02-0.10		0.0-0.5	.17	.17	i	İ	i
	36-60		1.55-1.80		0.01-0.07		0.0-0.5	.10	.15	i	i	i

Table 24.--Physical Properties of the Soils--Continued

Map symbol and soil name	Depth	 Clay	 Moist bulk	Permea- bility	Available water	 Linear extensi-	 Organic matter	ETOSI	on fac	Lors	Wind erodi- bility	
and soll hame		 	density	DITTLY	capacity	bility	Maccer	Kw	 Kf	 т	group	
	In	Pct	g/cc	In/hr	In/in	Pct	Pct			<u> </u>		
į		İ		, ·	į ,			İ	İ	İ	İ	İ
1653C:												
Stanberry	0-1		0.15-0.40		0.35-0.45		30-80	.02	.02	4	3	86
	1-3			0.60-2.00	'		0.5-2.0	.24	.24			
l l	3-19 19-24			0.60-2.00	0.09-0.19		0.5-2.0	.24	.24	 	 	
· ·	24-32				0.09-0.14		1	.20	.28	 	 	
i	32-42			0.20-0.60	0.06-0.11		0.0-0.5	.20	.28	i	<u> </u>	
į	42-80				0.02-0.05		0.0-0.5	.28	.28	į	į	İ
I												
Parkfalls	0-5			0.60-2.00	'		1.0-2.0	.24	.24	4	3	86
	5-8				0.09-0.19		0.5-2.0	.24	.24			
ļ	8-17 17-30				0.09-0.19		0.5-2.0	.24	.24	 		
ļ	30-33				0.10-0.14			.20	.28	l I	 	
i	33-48			0.20-0.60	0.04-0.07		0.0-0.5	.20	.28	İ	 	
i	48-80				0.03-0.05		0.0-0.5	.28	.28	İ	i	İ
į		į	İ		j	İ	İ	İ	į	į	į	į
Wozny	0-3	0 - 0	0.15-0.35	2.00-6.00	0.35-0.45		50-80	.02	.02	5	8	0
ļ	3-17	1	1	0.60-2.00	0.20-0.22		0.5-1.0	.32	.32			
	17-37	!	1		0.12-0.22		0.5-1.0	.43	.43	ļ		
ļ	37-56			0.20-0.60	0.12-0.19	1	0.5-1.0	.24	.24			
ļ	56-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17	 	 	l I
2015.		 	I I			I I	l I	l I	 	 	 	
Pits		İ	İ		i	İ	İ	İ	İ	i	i	İ
į		İ	İ		j	ĺ	ĺ	İ	j	İ	į	į
2050.												
Landfill			!		İ	!	!					
3011A: Barronett	0-9	0 22	 1 25 1 50	0.60-2.00	10 20 0 26		3.0-10	.32	 .32	 5	 5	 56
barronect	9-16				0.18-0.22		1	.43	.43	5	5	56
i	16-34			0.60-2.00	0.18-0.22		0.0-0.5	.43	.43	İ		
i	34-60				0.12-0.22		0.0-0.5	.37	.37	İ	i	İ
İ		ĺ	ĺ		İ	ĺ	ĺ	ĺ	ĺ	ĺ	ĺ	ĺ
3125A:												
Meehan	0-5		1.35-1.65		0.09-0.11		0.5-3.0	.10	.10	5	2	134
ļ	5-8	!	1.60-1.70		1	0.0-2.9	1	.15	.15			
l l	8-28 28-60		1.60-1.70 1.60-1.70		0.02-0.10		0.0-0.5	1.15	.15 .15	 	 	
· ·	20-00	0- 1	1.00-1.70	0.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.13	.13	 	 	
3126A:		 	İ			İ		i	 	i		
Wurtsmith	0-9	0-10	1.30-1.65	6.00-20	0.07-0.09	0.0-2.9	1.0-6.0	.10	.10	5	2	134
İ	9-37	0-5	1.40-1.60	6.00-20		0.0-2.9	0.0-0.5	.15	.15	ĺ	ĺ	ĺ
ļ	37-60	0-5	1.50-1.65	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15		[
3276A: Au Gres	0-2			 0.60-2.00	0 35 0 45	 	 			 5	 2	 134
Au Gies	2-5	1	1.50-1.70		1	0.0-2.9	65-85 0.6-1.0	.02	.02 .10	5	4	134
i	5-8		1.50-1.70		0.06-0.11			1.10	1 .10	 	 	
i	8-16		1.50-1.70		0.06-0.11		1	.10	.10	i	i	İ
į	16-28		1.50-1.70		0.06-0.11			.02	.02	İ	İ	İ
į	28-60	0-5	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.02	.02			
												ļ
3312B:												
Glendenning, very	0 5		1 40 1 65	0 60 2 22			1 1 0 2 2					
stony	0-5 5-15			0.60-2.00				.24	.24	4	8	0
	15-20			0.60-2.00				1.17	.24	I I	 	I I
	20-26			0.60-2.00				.17	.24	i		İ
i	26-40			0.20-0.60				.17	.24	i	į	į
										1		
Ï	40-65	7-17	1.65-1.90	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.17	.24			

Table 24.--Physical Properties of the Soils--Continued

Map symbol	Depth	Clay	 Moist	Permea-	Available		Organic		on fac		erodi-	Wind erodi
and soil name			bulk density	bility	water	extensi-	matter	1 77	77.5		bility	
	In	 Pct	density g/cc	In/hr	capacity In/in	bility Pct	Pct	Kw	Kf	T	group	Index
					,			ì		i		i
3312B:		İ			İ		ĺ	İ	ĺ	ĺ	ĺ	ĺ
Glendenning	0-7	,		0.60-2.00	,		1.0-2.0	.24	.24	4	8	0
l l	7-15 15-20	,		0.60-2.00 0.60-2.00	,		0.5-1.0	.24	.24		 	
i	20-26	,		0.60-2.00	,		0.0-0.5	1.17	.24		 	l I
i	26-40	,		0.20-0.60	,		0.0-0.5	.17	.24	i	İ	i
į	40-65	7-17	1.65-1.90	0.20-0.60	0.07-0.19	0.0-2.9	0.0-0.5	.17	.24	į	j	į
Į.	65-80	5-15	1.80-2.00	0.01-0.06	0.02-0.05	0.0-2.9	0.0-0.5	.17	.24	ļ		ļ
3336A:			 			 					 	
Fenander	0 - 9	3-8	 1.35-1.65	0.60-2.00	0.15-0.17	0.0-2.9	2.0-3.0	.28	.28	 5	 3	86
	9-15	,		0.60-2.00	,		0.5-1.0	.24	.24			
į	15-27	10-18	1.50-1.70	0.60-2.00	0.12-0.19	0.0-2.9	0.5-1.0	.24	.24	į	j	į
I	27-33	10-18	1.50-1.70	0.60-2.00	0.12-0.19	0.0-2.9	0.5-1.0	.24	.24			
	33-80	5-20	1.40-1.80	0.20-0.60	0.08-0.16	0.0-2.9	0.0-0.5	.32	.32			ļ
3403A:			 		 	 	 	1	 	 	 	l I
Loxley	0-13	0-0	0.30-0.40	6.00-20	0.55-0.65		70-90	.02	.02	3	8	0
-	13-60				0.35-0.45		70-90	.02	.02	İ	İ	İ
Beseman	0-36			0.60-6.00	0.35-0.45		25-75	.02	.02	2	8	0
	36-60	8-25	1.35-1.60	0.20-0.60	0.09-0.22	0.0-2.9 	0.5-1.0	.43	.43		 	
Dawson	0-8	0-0	0.15-0.30	6.00-20	0.55-0.65		65-85	.02	.02	2	8	0
į	8-38	0-0	0.15-0.40	0.20-6.00			65-85	.02	.02	i	İ	İ
İ	38-40	0-15	1.55-1.75	0.60-2.00	0.18-0.20	0.0-2.9	5.0-15	.37	.37	ĺ	ĺ	Ì
	40-60	0-10	1.55-1.75	6.00-20	0.03-0.07	0.0-2.9	0.0-0.5	.15	.15			ļ
3424C:		 	 		 	 	l I		 		 	l I
Frogcreek	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
j	4-13	,		0.60-2.00	,		1.0-2.0	.37	.37	į	İ	į
İ	13-19	6-16	1.65-1.85	0.20-0.60	0.07-0.20	0.0-2.9	0.0-0.5	.20	.28	ĺ	ĺ	Ì
ļ	19-32	,		0.20-0.60	,		0.0-0.5	.20	.28			
	32-46	,		0.20-0.60	,		0.0-0.5	.20	.28			
	46-80	2-10	1.85-2.00	0.06-0.20	0.02-0.05	0.0-2.9	0.0-0.5	.10	.17		 	
Magroc	0-2	5-17	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	1.0-3.0	.37	.37	3	 5	56
i	2-11	5-17	1.55-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37	į	į	į
I	11-22	5-17	1.55-1.65	0.60-2.00	0.20-0.22	0.0-2.9	0.0-0.5	.37	.37			
ļ	22-30	1	1	0.60-2.00	1		0.0-0.5	.32	.32			
	30-45				0.06-0.10		0.0-0.5	.17	.17			
	45-50 50-80	2-15	1	0.60-2.00 0.0000-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17		 	
i	50 00			0.0000 20		 				i		i
Stinnett	0 - 4	5-12	1.35-1.55	0.60-2.00	0.20-0.22	0.0-2.9	2.0-4.0	.37	.37	5	8	0
I	4-7	,		0.60-2.00	,			.37	.37			
Į.	7-18	,		0.60-2.00	,			1	.37			
	18-29	,		0.60-2.00	,				.37			
ļ	29-34 34-41	,		0.20-0.60 0.20-0.60	,				.28 .28		 	
ļ	41-55	,		0.20-0.60	,			1.10	1 .28		 	l I
i	55-80	,		0.06-0.20	,		0.0-0.5	.17	.17	i		i
į		į	j		j	İ	İ	İ	İ	į	j	į
Rock outcrop.												
3446A:		 	 		1	 	[[1	 	 	 	
Newson	0-3	0-0	0.10-0.35	6.00-20	0.35-0.55	 	30-80	.02	.02	5	 8	0
Ï	3-8	,	1.35-1.65		0.07-0.12		10-20		.10	İ	İ	İ
i	8-16	1-4	1.70-1.80	6.00-20	0.06-0.11	0.0-2.9	0.1-2.0	.15	.17			
l l					10 00 0 11		0 1 0 0	1 1 -	1 17	1	i	1
	16-22 22-60	,	1.70-1.80 1.70-1.80		0.06-0.11		0.1-2.0	1.15	.17 .15	1		1

Table 24.--Physical Properties of the Soils--Continued

								Erosi	on fac	tors	1	Wind
Map symbol	Depth	Clay	Moist	Permea-	Available		Organic	ļ				erodi
and soil name		 	bulk density	bility	water capacity	extensi-	matter	 Kw	 Kf		bility group	index
		<u> </u>						KW	KI	T	group	Index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct		 	l I		
3448B:						 		1	 			
Grettum	0-3	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15			
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	ĺ	İ	ĺ
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	ĺ	į	į
3448C:	 	 				 	 		 	 		
Grettum	0-3	2-12	1.35-1.60	6.00-20	0.09-0.11	0.0-2.9	1.0-3.0	.10	.10	5	2	134
	3-32	2-12	1.40-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	i
	32-75	2-12	1.40-1.65	2.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	İ	į	İ
	75-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
3516A:	 	 				 	 		 	 	 	
Slimlake	0-6	4-10	 1.30-1.70	2.00-6.00	0.12-0.14	0.0-2.9	1.0-3.0	.20	.20	3	3	86
	6-17			2.00-6.00	0.12-0.14		0.0-0.5	.24	.24		i	İ
	17-42	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	i	i	i
	42-53	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	i	i	i
	53-80	0-3	1.55-1.70	6.00-20	0.02-0.07	0.0-2.9	0.0-0.5	.10	.15	į	į	į
3629B:	 	 	 			 	 	1	 	 	 	
Perida	0-9	6-8	1.35-1.65	6.00-20	0.09-0.11	0.0-2.9	0.5-2.0	.10	.10	4	2	134
	9-43	0-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	İ
	43-45	2-8	1.45-1.65	6.00-20	0.05-0.10	0.0-2.9	0.0-0.5	.15	.15	i	i	i
	45-60	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	i	i	i
	60-74	50-80	1.45-1.70	0.01-0.06	0.08-0.10	6.0-8.9	0.0-0.5	.28	.28	i	i	i
	74-80	1-10	1.50-1.70	6.00-20	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	į	į	į
4-W.	 	 				 	 		 	 	 	
Miscellaneous water							į	į		į		į
√.	 	 	 			 	[[1	 	 	 	
Water	i	İ	i		i	i	i	i	İ	i	i	i

Table 25.--Chemical Properties of the Soils
(Absence of an entry indicates that data were not estimated)

Map symbol and soil name	Depth		Effective cation-		Calcium carbon-
		capacity	capacity		400
	In	meq/100 g	meq/100 g	рН	Pct
3A: Totagatic	0 - 4	 150-230	 	 4.5-6.5	0
10cagacic	4-8	1.0-3.0		4.5-6.5	0
	8-17	1.0-3.0		4.5-6.5	0
İ	17-28	1.0-3.0		4.5-6.5	0
	28-46	1.0-3.0		4.5-6.5	0
	46-70 70-80	1.0-3.0	 	4.5-6.5	0
	70-80	1.0-3.0	 	4. 5-6.5 	0
Bowstring	0-38	140-180		5.6-8.4	0
Ī	38-47	1.0-3.0		5.6-8.4	0
	47-80	140-180		5.6-8.4	0
Ausable	0-10	 150-230	 	 5.1-7.3	0
Ausable	10-60	1.0-9.0	 	6.1-7.8	0
	20 00		! 		
22A:		İ			İ
Comstock	0-8	6.0-25		4.5-7.3	0
	8-15 15-21		3.0-20	4.5-6.0	0
	21-34		4.0-25	4.5-6.0	0
	34-44		2.0-25	4.5-6.0	0
j	44-60	2.0-15	2.0-25	5.1-7.3	0
24A: Poskin	0-9	6.0-20	 	 4.5-7.3	0
FOSKIII	9-12	2.0-15	 	4.5-6.5	0
	12-19	3.0-20		4.5-6.5	0
İ	19-36	4.0-20		4.5-6.5	0
	36-39	0.0-15		4.5-6.5	0
	39-60	0.0-6.0		4.5-6.5	0
27A:				<u> </u> 	
Scott Lake	0-10	5.0-20		4.5-7.3	0
İ	10-17	1.0-15		4.5-6.5	0
	17-24	2.0-15		4.5-6.5	0
	24-31 31-80	0.0-10	 	4.5-6.5	0
	31-80	0.0-6.0	 	4.5-6.5 	0
28B:			! 	! 	İ
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
	4-15	1.0-15		4.5-6.0	0
	15-23	1.0-15		4.5-6.0	0
	23-35 35-49	1.0-15 1.0-15	 	4.5-6.0	0
	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
_					
Haugen	0-7 7-15	3.0-17 1.0-15		4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	!	Soil reaction 	Calcium carbon- ate
			capacity		
	In	meq/100 g	meq/100 g	pН	Pct
28B:			 	 	
Rosholt, very stony	0-4	3.0-15		4.5-7.3	0
	4-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34 34-60	1.0-10	 	4.5-6.5	0 0
	31 00		 		
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28 28-34	1.0-15	 	4.5-6.5	0 0
	34-60	0.0-6.0	 	4.5-6.5	0
	31 00		 		
28C:		İ		j	į
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
	4-15	1.0-15		4.5-6.0	0
	15-23 23-35	1.0-15		4.5-6.0	0 0
	35-49	1.0-15	 	5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
j	79-80	1.0-15		5.6-6.5	0
Haugen	0-7	3.0-17		4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0 0
	23-35	1.0-15	 	4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
j	49-79	1.0-15		5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
Darkelt stem.	0.4	2 0 15	İ		
Rosholt, very stony	0-4 4-10	3.0-15 1.0-10	 	4.5-7.3	0 0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8 8-10	3.0-15 1.0-10	 	4.5-7.3	0 0
	10-14	1.0-10	 	4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
33B: Chetek	0-10	3.0-16	 	 5.1-7.3	 0
CHECGY	10-16	1.0-15	 	5.1-7.3	0
	16-20	1.0-9.0		5.1-6.0	0
	20-60	1.0-3.0		5.1-6.5	0
					ļ
33C:	0.10		 		
Chetek	0-10 10-16	3.0-16 1.0-15		5.1-7.3 5.1-6.0	0 0
	16-20	1.0-15	 	5.1-6.0	0
	20-60	1.0-3.0		5.1-6.5	0
		İ	İ	İ	i

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	capacity	cation- exchange	!	Calcium carbon- ate
		:	capacity		<u> </u>
	In	meq/100 g	meq/100 g	pH	Pct
38A:			 	 	
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
I	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
ļ	34-60	0.0-6.0		4.5-6.5	0
38B:		1	 	 	
Rosholt	0-8	3.0-15		4.5-7.3	0
i	8-10	1.0-10		4.5-6.5	0
į	10-14	1.0-10		4.5-6.5	0
I	14-28	1.0-15		4.5-6.5	0
I	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
38C: Rosholt	0-8	3.0-15	 	 4.5-7.3	0
ROSHOIT	0-8 8-10	1.0-10	 	4.5-7.3	0 0
· ·	10-14	1.0-10	 	4.5-6.5	0
i	14-28	1.0-15	l	4.5-6.5	0
i	28-34	1.0-10		4.5-6.5	0
į	34-60	0.0-6.0		4.5-6.5	0
İ		Ì	ĺ		İ
38D:					
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10	1.0-10		4.5-6.5	0
ļ	10-14	1.0-10		4.5-6.5	0
ļ	14-28 28-34	1.0-15	 	4.5-6.5	0 0
ļ	34-60	0.0-6.0	 	4.5-6.5	0
i	31 00		! 	1.5 0.5	
42D:		İ			İ
Amery	0-3	3.0-15		4.5-6.5	0
I	3-22		1.0-15	4.5-6.0	0
I	22-34	1.0-15		5.1-6.5	0
ļ	34-41	1.0-15		5.1-6.5	0
!	41-57	1.0-15		5.1-6.5	0
	57-71	1.0-15		5.1-6.5	0
l l	71-80	1.0-15		5.6-6.5	0
43B:			 	 	
Antigo	0-9	4.0-20		4.5-7.3	0
i		3.0-15		4.5-6.5	
į	12-19	3.0-15		4.5-6.5	0
I	19-28	3.0-15		4.5-6.5	0
I	28-31	0.0-15		4.5-6.5	0
		0.0-15		4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0
43C:			 	 	1
Antigo	0 - 9	4.0-20	 	4.5-7.3	0
	9-12	'	 	4.5-6.5	0
		3.0-15		4.5-6.5	0
ļ		3.0-15		4.5-6.5	0
İ		0.0-15		4.5-6.5	0
į	31-33	0.0-15		4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

		<u> </u>	<u> </u>	<u> </u>	<u> </u>
Map symbol and soil name	Depth		Effective cation-		Calcium
and soil name			exchange		ate
		:	capacity		
	In	meq/100 g	meq/100 g	рн	Pct
43D:			 	 	
Antigo	0-9	4.0-20		4.5-7.3	0
	9-12 12-19	3.0-15	 	4.5-6.5	0
	19-28	3.0-15	 	4.5-6.5	0
j	28-31	0.0-15	 	4.5-6.5	0
İ	31-33	0.0-15	i	4.5-6.5	0
	33-60	0.0-6.0		4.5-6.5	0
48A:					
Brill	0-7	4.0-20		4.5-7.3	0
	7-11 11-19	3.0-20	 	4.5-6.5	0
	19-34	4.0-25	 	4.5-6.5	0
j	34-38	0.0-15	 	4.5-6.5	0
	38-60	0.0-6.0		4.5-6.5	0
63A:			 	 	
Crystal Lake	0-8	6.0-25		4.5-7.3	0
	8-12	2.0-20		4.5-7.3	0
	12-20 20-32		3.0-25 4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25	4.5-7.3	0
63B:		İ	 -	 -	İ
Crystal Lake	0 - 8	6.0-25	 	 4.5-7.3	0
	8-12	2.0-20		4.5-7.3	0
	12-20		3.0-25	4.5-6.0	0
	20-32 32-60	2.0-15	4.0-25 2.0-25	4.5-6.0	0 0
62.0		į	į	į	į
63C: Crystal Lake	0-8	6.0-25	 	 4.5-7.3	0
Ī	8-12	2.0-20	i	4.5-7.3	0
	12-20		3.0-25	4.5-6.0	0
	20-32		4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25 	4.5-7.3 	0
63E: Crystal Lake	0-8	 6.0-25	 	 4.5-7.3	0
cryptar name	8-12	2.0-20	 	4.5-7.3	0
i	12-20		3.0-25	4.5-6.0	0
İ	20-32		4.0-25	4.5-6.0	0
	32-60	2.0-15	2.0-25	4.5-7.3	0
64A:					
Totagatic	0-4	150-230	!	4.5-6.5	0 0
	4-8 8-17	1.0-3.0	!	4.5-6.5	1
	17-28	1.0-3.0		4.5-6.5	0
	28-46	1.0-3.0	!	4.5-6.5	0
	46-70	1.0-3.0	!	4.5-6.5	0
	70-80	1.0-3.0	 	4.5-6.5	0
Winterfield	0-7	2.0-15		5.6-7.8	0
	7-60	1.0-5.0		5.6-8.4	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective cation- exchange		Calcium carbon-
			capacity		
	In	meq/100 g	meq/100 g	pН	Pct
69B: Keweenaw	0-2	3.0-9.0	 	 4.5-6.5	0
reweemaw	2-4	3.0-3.0	 	4.5-6.5	0
	4-16	1.0-9.0		4.5-6.5	0
j	16-20	0.0-15		4.5-6.5	0
	20-27	0.0-15		4.5-6.5	0
	27-43	0.0-15		4.5-6.5	0
	43-75 75-80	0.0-15	 	4.5-6.5 5.1-6.5	0 0
	, , 5 00				
Sayner	0-2	2.0-10		4.5-6.5	0
j	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22 22-60	0.0-4.0	 	4.5-6.5	0 0
	22-60	0.0-6.0		4.5-0.5	0
Vilas	0-2	2.0-10		4.5-7.3	0
İ	2-4	1.0-6.0		4.5-6.5	0
	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0		4.5-6.5	0
59C:					
Keweenaw	0-2	3.0-9.0		4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
	4-16	1.0-9.0		4.5-6.5	0
	16-20	0.0-15		4.5-6.5	0
	20-27 27-43	0.0-15	 	4.5-6.5	0 0
	43-75	0.0-15	 	4.5-6.5	0
	75-80	0.0-15		5.1-6.5	0
					į
Sayner	0-2	2.0-10		4.5-6.5	0
	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14 14-22	0.0-4.0	2.0-8.0	4.5-6.0	0 0
	22-60	0.0-4.0	 	4.5-6.5	0
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
	4-11	'		4.5-6.5	0
	11-23 23-32		 	4.5-6.5	0 0
	32-80	1	 	4.5-6.5	0
					į
69E:					
Keweenaw	0-2	3.0-9.0		4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
	4-16 16-20	1	 	4.5-6.5	0
	20-27	0.0-15	 	4.5-6.5	0
	27-43			4.5-6.5	0
	43-75			4.5-6.5	0
	75-80	0.0-15	i	5.1-6.5	i o

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	capacity	Effective cation- exchange capacity	reaction	Calcium carbon- ate
	In	·	meq/100 g		Pct
İ					İ
69E:					
Sayner	0-2 2-4	2.0-10	 	4.5-6.5	0 0
	2-4 4-7	1.0-6.0	2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
****	0.0				
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4 4-11	1.0-6.0	 	4.5-6.5	0 0
	11-23	0.0-5.0	 	4.5-6.5	0
	23-32	0.0-3.0	 	4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
	32-80	0.0-3.0	 	4.5-0.5	0
74B:		İ	İ	İ	j
Vilas	0-2	2.0-10		4.5-7.3	0
I	2-4	1.0-6.0		4.5-6.5	0
	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
74C:					
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
I	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
74D:					
Vilas	0-2	2.0-10		4.5-7.3	0
	2-4	1.0-6.0		4.5-6.5	0
I	4-11	2.0-9.0		4.5-6.5	0
	11-23	0.0-5.0		4.5-6.5	0
I	23-32	0.0-3.0		4.5-6.5	0
	32-80	0.0-3.0	 	4.5-6.5	0
100B:			 		
Menahga	0-2	1.0-8.0		4.5-5.5	0
I	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
100C:			 	 	
Menahga	0-1		80-120	4.5-5.5	0
i	1-2	1.0-8.0		4.5-5.5	0
į	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
100D:			 	 	
Menahga	0-1		80-120	4.5-5.5	0
-	1-2	1.0-8.0		4.5-5.5	0
i	2-25		2.0-4.0	4.5-5.5	0
	25-90	0.0-2.0		5.1-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective cation- exchange		Calcium carbon-
		<u> </u>	capacity	<u> </u>	i
	In	meq/100 g	meq/100 g	PH	Pct
127D:			 	 	
Amery	0-3	3.0-15		4.5-6.5	0
	3-22		1.0-15	4.5-6.0	0
	22-34	1.0-15		5.1-6.5	0
	34-41 41-57	1.0-15	 	5.1-6.5	0
	57-71	1.0-15	 	5.1-6.5	0 0
	71-80	1.0-15		5.6-6.5	0
Rosholt	0-4	3.0-15	 	4.5-7.3	0
ROBIIOTE	4-10	1.0-10	 	4.5-6.5	0
İ	10-14	1.0-10		4.5-6.5	0
j	14-28	1.0-15		4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0	 	4.5-6.5	0
127E:					į
Amery	0-3	3.0-15		4.5-6.5	0
	3-22 22-34	1.0-15	1.0-15	5.1-6.5	0
	34-41	1.0-15		5.1-6.5	0
	41-57	1.0-15		5.1-6.5	0
İ	57-71	1.0-15		5.1-6.5	0
	71-80	1.0-15		5.6-6.5	0
Rosholt	0 - 4	3.0-15	 	4.5-7.3	0
	4-10	1.0-10		4.5-6.5	0
	10-14	1.0-10		4.5-6.5	0
	14-28 28-34	1.0-15	 	4.5-6.5	0 0
	34-60	0.0-6.0		4.5-6.5	0
156B:			 	 	
Magnor, very stony	0-4		3.0-20	3.5-7.3	0
	4-11		1.0-15	3.5-6.0	0
	11-16		1.0-15	3.5-6.0	0
	16-21		1.0-15	3.5-6.0	0
	21-39 39-58	1.0-15	 	4.5-6.5	0
	58-60	1.0-10		5.1-6.5	0
Magnor	0-8		 3.0-20	 3.5-7.3	0
	8-11		1.0-15	3.5-6.0	0
İ	11-16	i	1.0-15	3.5-6.0	0
	16-21	1	1.0-15	3.5-6.0	
	21-39	1		4.5-6.5	
	39-58 58-60	1	 	4.5-6.5 5.1-6.5	0
157B:			 	 	
Freeon, very stony	0-4		 3.0-20	4.5-6.5	0
	4-19	'		4.5-6.5	0
	19-39			4.5-6.5	0
	39-53 53-80	1.0-10 1.0-10	 	4.5-6.5	0 0
H	0.4				
Freeon	0-4 4-19	1.0-15	3.0-20	3.5-7.3	0 0
	19-39	'	 	4.5-6.5	1
					1
	39-53	1.0-10		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	cation-		Calcium carbon- ate
		:	capacity		
	In	meq/100 g	meq/100 g	рН	Pct
157C: Freeon, very stony	 0-4		 3.0-20	 4.5-6.5	0
Freedi, Very Stony	0-4	1.0-15	3.0-20	4.5-6.5	0
	19-39	1.0-15	 	4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80	1.0-10		4.5-6.5	0
Freeon	 0-4		 3.0-20	 3.5-7.3	0
	4-19	1.0-15		4.5-6.5	0
	19-39	1.0-15		4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80 	1.0-10	 	4.5-6.5	0
160A:					
Oesterle	0-7	6.0-20		4.5-6.5	0
	7-11	3.0-15		4.5-6.5	0
	11-31 31-60	1.0-10	 	4.5-6.5	0 0
	31-00			4.5-0.5	
182B:	İ	İ	j	İ	j
Padus	0-2	3.0-15		4.5-7.3	0
	2-3	1.0-10		4.5-6.5	0
	3-19	1.0-15	3.0-15	4.5-6.0	0
	19-26 26-38	1.0-15	 	4.5-6.5	0 0
	38-60	0.0-6.0		4.5-6.5	0
182C:			 	 	
Padus	0-2	3.0-15		4.5-7.3	0
	2-3	1.0-10	i	4.5-6.5	0
	3-19		3.0-15	4.5-6.0	0
	19-26	1.0-15		4.5-6.5	0
	26-38	1.0-15		4.5-6.5	0
	38-60 	0.0-6.0	 	4.5-6.5 	0
192A:			ĺ		į
Worcester	0-2	3.0-20	 3.0-15	4.5-7.3	0
	2-3 3-6		3.0-15	4.5-6.0	0 0
	6-16		3.0-15	4.5-6.0	0
	16-20	2.0-15	i	4.5-6.5	0
	20-32	2.0-15		4.5-6.5	0
		1.0-7.0		4.5-6.5	
	39-60 	0.0-6.0	 	4.5-6.5	0
193A:				 	
Minocqua		120-190		4.5-7.8	0
		2.0-20		4.5-7.8	
		1.0-15		4.5-6.5	:
	28-60 	0.0-6.0	 	4.5-6.5	0
215B:		į	į		į
Pence	0-3 3-8	1		4.5-7.3	0
	3-8 8-15	1	 2.0-15	4.5-7.3	,
		0.0-10	2.0-15	4.5-6.5	,
		0.0-6.0		4.5-6.5	

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity	!		Calcium carbon- ate
	In	<u> </u>	meg/100 g	рн	Pct
	111	meq/100 g	meq/100 g 	PH	
215C:					
Pence	0-3 3-8	3.0-15	 	4.5-7.3	0
	8-15		2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0	i	4.5-6.5	0
215D:			 	 	
Pence	0-3	3.0-15	 	4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
	8-15	j	2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0		4.5-6.5	0
315A:			 	 	
Rib	0-7	8.0-35		4.5-7.3	0
	7-10	2.0-15		4.5-7.3	0
	10-32	4.0-25		4.5-7.3	0
	32-35	1.0-20		4.5-7.3	0
	35-37 37-60	0.0-10		4.5-7.3	0
	37-60	0.0-6.0	 	5.5-8.4	0
337A:					
Plover	0-10	5.0-10		4.5-7.3	0
	10-13		2.0-15	4.5-6.5	0
	13-18		2.0-15	4.5-6.5	0
	18-32		2.0-15	4.5-6.5	0
	32-60	1.0-10	 	5.1-6.5	0
368B:				 	
Mahtomedi	0 - 5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
	15-30 30-60	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-7.6	0
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0	 	4.5-6.5	0
368C:					
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	1		5.1-6.5	0
	15-30 30-60		 	5.1-6.5	0
			!		
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36 36-60	0.0-6.0	0.0-7.0	4.5-6.0	0
			<u> </u>		
368D:			ļ	ļ	İ
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15 15-30	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-0.5	0
		1	i I	, <u></u>	1

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	capacity	cation- exchange		Calcium carbon- ate
	In	·	capacity meq/100 g	рн	Pct
368D:					
Cress	0-3 3-15	2.0-20	 	4.5-7.3	0
	15-31	1.0-15	0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
371A:					
Croswell	0-1 1-7	2.0-10	 1.0-5.0	4.5-7.3	0
	7-16		1.0-4.0	4.5-7.3	0
	16-39		1.0-3.0	4.5-7.3	0
	39-60	1.0-2.0		5.1-8.4	0
380B: Cress	0.2	2.0-20	 	 4.5-7.3	0
Cress	0-3 3-15	1.0-15	 	4.5-7.3	0
j	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8	3.0-15		4.5-7.3	0
	8-10 10-14	1.0-10	 	4.5-6.5	0
	14-28	1.0-10	 	4.5-6.5	0
	28-34	1.0-10		4.5-6.5	0
j	34-60	0.0-6.0		4.5-6.5	0
380C: Cress	0-3	2.0-20	 	 4.5-7.3	0
Cless	3-15	1.0-15	 	4.5-7.3	0
	15-31		0.0-7.0	4.5-6.0	0
İ	31-36	i	0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Desta 14	0.0	2 0 15			
Rosholt	0-8 8-10	3.0-15	 	4.5-7.3	0
	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
j	28-34	1.0-10		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
2000.			 	 	
380D: Cress	0-3	2.0-20	 	 4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
j	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
Rosholt	0-8	3.0-15	l I	 4.5-7.3	0
	8-10			4.5-6.5	0
İ	10-14	1.0-10		4.5-6.5	0
	14-28	1.0-15		4.5-6.5	0
	28-34	1		4.5-6.5	0
	34-60	0.0-6.0		4.5-6.5	0
383B:			 	 	
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0	i	5.1-7.8	i o

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity		Soil reaction 	Calcium carbon- ate
	In	<u> </u>	meq/100 g	рн	Pct
383C: Mahtomedi	0-5	2.0-11	 	 5.1-6.5	0
Mantomedi	5-8	0.0-6.0	 	5.1-6.5	0
	8-15	0.0-6.0	l	5.1-6.5	0
	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0	i	5.1-7.8	0
383D:					
Mahtomedi	0-5	2.0-11		5.1-6.5	0
	5-8 8-15	0.0-6.0	 	5.1-6.5	0
	15-30	0.0-6.0	 	5.1-6.5	0
	30-60	0.0-6.0	 	5.1-7.8	0
		İ	İ		İ
396B:		İ	İ	İ	į
Friendship	0 - 4		1.0-4.0	4.5-7.3	0
	4-29		1.0-2.0	4.5-6.5	0
	29-60		1.0-2.0	4.5-6.5	0
Wurtsmith	0-6		 2.0-14	 3.5-5.5	0
wurtsmith	6-33		1.0-2.0	3.5-5.5	0
	33-60		1.0-2.0	3.5-0.0	0
	33 00	İ	1.0 2.0	3.3 7.3	
Grayling	0-3	i	2.0-14	3.5-5.5	0
	3-15	j	1.0-4.0	3.5-5.5	0
	15-23	1.0-2.0		5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
397A: Perchlake	0-9	1.0-7.0	 	 4.5-6.5	
Perchiake	9-18	1.0-7.0	 	4.5-6.5	0
	18-42	1.0-4.0	 	4.5-6.5	0
	42-46		2.0-15	4.5-6.5	0
	46-60	0.0-3.0	i	4.5-6.5	0
399B:		!	!		
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15 15-23	1.0-2.0	1.0-4.0	3.5-5.5	0
	23-60	1.0-2.0	 	5.6-7.3	0
	23 00		! 	3.0 7.3	
399C:		İ	İ		i
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15		1.0-4.0	'	0
	15-23	1		5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
399D:		1	 	 	1
Grayling	0-3		2.0-14	3.5-5.5	0
	3-15		1.0-4.0	3.5-5.5	1
	15-23	1.0-2.0	i	5.6-7.3	0
	23-60	1.0-2.0		5.6-7.3	0
405A:					
Lupton	0-65	140-180		5.6-7.8	0
Cathro	0-28	150-230	 	 4.5-7.8	0
	28-49		 	5.6-7.3	5-25
	49-60	'		5.6-7.3	5-25
		j			į
Tawas	0-31	1		4.5-7.8	0
	31-60	1.0-7.0		5.6-8.4	0

Table 25.--Chemical Properties of the Soils--Continued

	capacity		reaction	carbon-
 In	·		рН	Pct
 0-13 13-60	 	 50-100 50-120	3.5-4.4	 0 0
0-80	140-200	 	4.5-7.3	0
0-32	150-230 1.0-3.0	 	4.5-7.8	0 0
0-80	140-200	 	4.5-7.3	0
0-28	150-230		4.5-7.8	0
28-49	2.0-20		•	5-25
49-60	2.0-20	 	5.6-7.3	5-25
İ	İ	İ		İ
1	1			0
4-60	140-160	 	5.6-7.3	0
0-8	150-200		5.6-7.8	0
8-40	150-200		5.6-7.8	0
40-42	2.0-15	 	5.5-7.8	0 0
0-60		50-120	3.5-4.5	0
0-3		4.0-10	3.5-6.5	0
		1		0
35-60		1.0-5.0	3.5-7.3	0 0
		00 100		0
0-1 1-2				0
2-25		2.0-4.0	4.5-5.5	0
25-80	0.0-2.0	 	5.1-7.3	0
İ				
0-3		4.0-10		0
				0
35-60		1.0-5.0	3.5-7.3	0
 0-1		 80-120	4.5-5.5	0
1-2		4.0-10	3.5-6.5	0
2-25	0.0-2.0	2.0-4.0	4.5-5.5	0
İ				
n-3		 4 0-10	 3 5 ₋ 6 5	0
3-22		2.0-4.0	3.5-6.5	0
22-35		1.0-5.0	3.5-7.3	0
35-60		1.0-5.0	3.5-7.3	0
0-1		80-120	4.5-5.5	0
1-2 2-25		4.0-10	3.5-6.5 4.5-5.5	0
	0-13 13-60 0-80 0-80 0-32 32-60 0-80 0-28 28-49 49-60 0-4 4-60 0-8 8-40 40-42 42-60 0-60 0-60 0-1 1-2 2-25 25-80 0-1 1-2 2-25 25-80 0-3 3-22 22-35 35-60 0-1 1-2 2-25 25-80 0-3 0-3 0-3 0-3 0-1 1-2 g	0-13		

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective cation- exchange		Calcium carbon-
			capacity	!	
	In	meq/100 g	meq/100 g	pН	Pct
441C:			l I	l I	
Freeon	0-4		3.0-20	 3.5-7.3	0
	4-19	1.0-15		4.5-6.5	0
j	19-39	1.0-15		4.5-6.5	0
	39-53	1.0-10		4.5-6.5	0
	53-80	1.0-10		4.5-6.5	0
Cathro	0-28	150-230	 	4.5-7.8	0
İ	28-49	2.0-20	i	5.6-7.3	5-25
	49-60	2.0-20		5.6-7.3	5-25
442C:			 	 	
Haugen	0 - 4	3.0-17	 	4.5-6.5	0
i	4-15	1.0-15	i	4.5-6.0	0
	15-23	1.0-15		4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
	49-79 79-80	1.0-15	 	5.6-6.5	0
	79-80	1.0-15	 	5.0-0.5	0
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
443D:			 	 	
Amery	0-3	3.0-15	 	4.5-7.3	0
-	3-22	i	1.0-15	4.5-6.0	0
j	22-34	1.0-15		5.1-6.5	0
	34-41	1.0-15		5.1-6.5	0
	41-57	1.0-15		5.1-6.5	0
	57-71	1.0-15	 	5.1-6.5	0
	71-80	1.0-15	 	5.6-6.5	0
Greenwood	0 - 6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
461A:			 	 	
Bowstring	0-38	140-180		5.6-8.4	0
-	38-47	1.0-3.0	i	5.6-8.4	0
	47-80	140-180		5.6-8.4	0
484A:			 	 	
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
Beseman	0-36		 50-150	 3.5-4.4	 0
Deseman		3.0-15		3.5-7.3	0
495B:					
Karlsborg	0-9	2.0-10	 	4.5-6.5	0
	9-28 28-48	!	 	4.5-6.5	0
		1.0-5.0	 	4.5-6.5	0
		į	į	İ	į
Grettum	0-3		2.0-15	3.5-7.3	0
	3-32	!	1.0-10	3.5-7.3	:
	32-75 75-80		1.0-10	5.1-7.3	0
	13-80	1.0-9.0		J.I-/.3	

Table 25.--Chemical Properties of the Soils--Continued

495B: Perida	In	meq/100 g	capacity meq/100 g	 pH 	Pct
	 0-9 9-43 43-45			Hq 	Pct
	9-43	'			1
	9-43	'		I	
	9-43	'		 3.5-7.3	0
				3.5-7.3	0
	45-60	2.0-10		3.5-7.3	0
		12-65		3.5-7.8	0
	60-74	12-65		3.5-7.8	0
	74-80	1.0-9.0		4.5-7.3	0
495C:	 	1	 	 	
Karlsborg	0-9	2.0-10		4.5-6.5	0
5	9-28	2.0-10		4.5-6.5	0
	28-48	12-65		4.5-6.5	0
	48-80	1.0-5.0		4.5-6.5	0
Grettum	0-3		2.0-15	3.5-7.3	0
	3-32		1.0-10 1.0-10	3.5-7.3 5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
Perida	0-9	2.0-10		3.5-7.3	0
	9-43	2.0-10		3.5-7.3	0
	43-45	2.0-10		3.5-7.3	0
	45-60	12-65		3.5-7.8	0
	60-74	12-65		3.5-7.8	0
	74-80	1.0-9.0		4.5-7.3	0
495D:	 			 	
Karlsborg	0-9	2.0-10		4.5-6.5	0
-	9-28	2.0-10		4.5-6.5	0
	28-48	12-65		4.5-6.5	0
	48-80	1.0-5.0		4.5-6.5	0
					
Grettum	0-3 3-32		2.0-15 1.0-10	3.5-7.3	0
	3-32		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
		İ			
Perida	0-9	2.0-10		3.5-7.3	0
	9-43	2.0-10		3.5-7.3	0
	43-45	2.0-10		3.5-7.3	0
	45-60	12-65		3.5-7.8	0
	60-74	12-65	 	3.5-7.8	0
	74-80	1.0-9.0	 	4.5-7.3	0
497A:	 	1	 	 	
Meenon	0-9	2.0-10		4.5-7.3	0
	9-28	1.0-10		4.5-7.3	0
	28-41	10-70		3.5-7.8	0
	41-80	0.0-7.0		4.5-6.5	0
E1 E 7 .			 -	 -	
515A: Manitowish	 0-3	3.0-15	 	 4.5-7.3	0
Manit COWISH	3-4	1.0-15	 	4.5-7.3	0
	4-16	!	3.0-15	4.5-6.0	
	16-19	!		4.5-6.5	0
	19-60			4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity		Soil reaction 	Calcium carbon- ate
į		i -	capacity		j
ĺ	In	meq/100 g	meq/100 g	рН	Pct
521A: Dody	0-3	40-100	 	 4.5-7.3	0
body	3-9	6.0-50	l	4.5-7.3	0
i	9-20	1.0-15		4.5-7.3	0
i	20-23	1.0-15		4.5-7.3	0
İ	23-47	10-65		4.5-6.5	0
I	47-58	1.0-15		4.5-6.5	0
	58-80	1.0-15		4.5-6.5	0
524E: Rock outcrop.		 	 	 	
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
į	4-13	i	3.0-15	4.5-6.0	0
I	13-19	1.0-15		5.1-6.5	0
I	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0
Metonga	0-3	5.0-20	 	4.5-7.3	0
i	3-4	j	2.0-15	3.6-6.0	0
İ	4-25		3.0-15	3.6-6.0	0
I	25-28	1.0-9.0		5.1-6.5	0
	28-80				0
542B:			 	 	
Haugen, very stony	0 - 4	3.0-17		4.5-6.5	0
İ	4-15	1.0-15		4.5-6.0	0
I	15-23	1.0-15		4.5-6.0	0
	23-35	1.0-15		4.5-6.0	0
	35-49	1.0-15		5.6-6.5	0
ļ	49-79 79-80	1.0-15	 	5.6-6.5	0
l I	73-60	1.0-15	 	3.0-0.5	0
Haugen	0 - 7	3.0-17		4.5-6.5	0
I	7-15	1.0-15		4.5-6.0	0
ļ	15-23	1.0-15		4.5-6.0	0
!	23-35	1.0-15		4.5-6.0	0
ļ	35-49 49-79	1.0-15	 	5.6-6.5	0
ļ	79-80	1.0-15	 	5.6-6.5	0
	73-80	1.0-13	 	3.0-0.3	0
542C:		İ	İ	İ	İ
Haugen, very stony		3.0-17		4.5-6.5	0
!	4-15	1.0-15		4.5-6.0	0
ļ	15-23	1	 	4.5-6.0	0
ļ	23-35 35-49	1	 	5.6-6.5	0
ļ	49-79	1.0-15	l	5.6-6.5	0
	79-80	1.0-15		5.6-6.5	0
į				ĺ	
Haugen	0-7	3.0-17	 	4.5-6.5	0
	7-15 15-23	1.0-15	 	4.5-6.0	0
	23-35	1	 	4.5-6.0	1
 	35-49	'	 	5.6-6.5	0
	49-79	1.0-15		5.6-6.5	0
		1.0-15	:	5.6-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange	1	Soil reaction	Calcium
	 	capacity	exchange capacity	 	ate
	In	meq/100 g	meq/100 g	pH	Pct
543B:			 	 	
Anigon	 0-10	4.0-20	 	4.5-7.3	0
J	10-14	3.0-20		4.5-6.5	0
j	14-20	4.0-25		4.5-6.5	0
	20-30	4.0-25		4.5-6.5	0
	30-34	1.0-15	 	4.5-6.5	0
	34-60 	0.0-6.0	 	4.5-6.5 	0
543C2:		! 	! 	! 	
Anigon	0-10	4.0-20		4.5-7.3	0
	10-14	3.0-20		4.5-6.5	0
	14-20	4.0-25		4.5-6.5	0
	20-30	4.0-25		4.5-6.5	0
	30-34 34-60	1.0-15	 	4.5-6.5	0
	34-00 	0.0-8.0	 	4.5-6.5	0
544F:		! 	! 	! 	
Menahga	0-1	j	80-120	4.5-5.5	0
	1-2	1.0-8.0		4.5-5.5	0
	2-25		2.0-4.0	4.5-5.5	0
	25-80	0.0-2.0		5.1-7.3	0
Mahtomedi	 0-5	2.0-11	 	 5.1-6.5	 0
Maircomedi	5-8	0.0-6.0		5.1-6.5	0
	8-15	0.0-6.0		5.1-6.5	0
İ	15-30	0.0-6.0		5.1-6.5	0
	30-60	0.0-6.0		5.1-7.8	0
FFF3					
555A: Fordum	l l 0-6	10-45	l I	 4.5-8.4	 0
ror dam	6-18	3.0-20		4.5-8.4	0
	18-30	3.0-20		4.5-8.4	0
İ	30-60	2.0-6.0		5.6-8.4	0
		!			
574B:					
Sayner	0-2 2-4	2.0-10	 	4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
İ	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
5546					
574C: Sayner	 0-2	2.0-10	 	 4.5-6.5	0
bayner	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14	j	2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0
574E:	 		 	 	
Sayner	 0-2	2.0-10	 	 4.5-6.5	0
1	2-4	1.0-6.0		4.5-6.5	0
	4-7		2.0-8.0	4.5-6.0	0
	7-14		2.0-8.0	4.5-6.0	0
	14-22	0.0-4.0		4.5-6.5	0
	22-60	0.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth 	Cation- exchange capacity	cation-		Calcium carbon- ate
	In	meq/100 g	meq/100 g	pН	Pct
		į			İ
579B:		2 0 15	 		
Parkfalls	0-5 5-8	3.0-15	2.0-15	4.5-6.5	0 0
	8-17		2.0-15	4.5-6.5	0
	17-30	1.0-15		4.5-6.5	0
	30-33	1.0-15	i	4.5-6.5	0
	33-48	2.0-15		4.5-6.5	0
	48-80	1.0-15		5.6-7.3	0
600A: Haplosaprists.		 	 	 	
Psammaquents.	 	į i	 -	 	i i
615B:	İ	İ	İ		į
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31 31-36		0.0-7.0	4.5-6.0	0 0
	36-60	0.0-6.0	0.0-7.0	4.5-6.5	0
			! 		
615C:	İ	İ	İ	İ	į
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36 36-60	0.0-6.0	0.0-7.0	4.5-6.0	0 0
	30-00			4.5-0.5	
615D:		İ	ĺ		İ
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15	 0.0-7.0	4.5-6.0	0 0
	15-31 31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0		4.5-6.5	0
		į	į		į
623A:		100 155			
Capitola	0-5 5-7	100-155 8.0-35	 	4.5-7.3	0 0
	7-22	3.0-15	 	4.5-7.3	0
	22-33	2.0-15		4.5-7.3	0
	33-60	1.0-10	i	5.1-7.8	0
624A:					
Ossmer	0-4 4-6	6.0-20 1.0-15	 	4.5-7.3	0 0
	6-11			4.5-6.5	1
	11-26	1.0-15		4.5-6.5	0
	26-34	1.0-15	i	4.5-6.5	0
	34-38	1.0-15		4.5-6.5	0
	38-60	0.0-6.0	 	4.5-6.5	0
632A:				! 	
Aftad	0-10	3.0-10		4.5-7.3	0
	10-29	!		4.5-6.5	0
	29-36	2.0-15		4.5-6.5	0
	36-41 41-60		 	4.5-6.5 5.1-6.5	0 0
	1	1 1.0-10	ı	1 2.1-0.3	0

Table 25.--Chemical Properties of the Soils--Continued

 	!	!	reaction	carbon-
In	meg/100 g		pH	Pct
į		İ	j -	į
0-10	3.0-10		4.5-7.3	0
10-29	1			0
	1	!		0
!	'	!		0
41-60	1.0-10		2.1-0.2	0
l I		 	 	
0-10	3.0-10		4.5-7.3	0
10-29	2.0-10		4.5-6.5	0
29-36	2.0-15		4.5-6.5	0
36-41	2.0-15		4.5-6.5	0
41-60	1.0-10		5.1-6.5	0
 0-3	3 0-15	 	 45_73	 0
!	1	!		0
!		!		0
15-21	0.0-10		4.5-6.5	0
21-60	0.0-6.0		4.5-6.5	0
j	j	İ	j	į
0-2	3.0-15		4.5-7.3	0
2-3	1.0-10		4.5-6.5	0
3-19	1	3.0-15		0
!	1			0
!	'	!		0
38-60	0.0-6.0		4.5-6.5	0
l I	l l	 	 	
0-4	8.3-13	 	4.5-7.3	0
	1			0
5-10	4.6-12		4.5-6.5	0
10-18	4.6-12	i	4.5-6.5	0
18-27	4.6-12		4.5-6.5	0
27-34	5.5-14		4.5-6.5	0
34-38	4.8-12		4.5-6.5	0
38-60	1.0-5.5		4.5-6.5	0
 0-2	3 0-15	l 	 45-65	0
!	1	!		0
!	1	!		0
		i		0
27-43	0.0-15	i	4.5-6.5	0
43-75	0.0-15		4.5-6.5	0
75-80	0.0-15		5.1-6.5	0
0.3	2 0 15	 		
!	'	 -		0 0
	1			0
	'	2.0-15		0
	'	 	4.5-6.5	0
	0-10 10-29 29-36 36-41 41-60 0-10 10-29 29-36 36-41 41-60 0-3 3-8 8-15 15-21 21-60 0-2 2-3 3-19 19-26 26-38 38-60 0-4 4-5 5-10 10-18 18-27 27-34 34-38 38-60 0-2 2-4 4-16 16-20 0-2 27-43 34-38 38-60 0-2 27-43 43-75 75-80 0-3 3-8 8-15	capacity	capacity exchange capacity In meq/100 g meq/100 g 0-10 3.0-10 10-29 2.0-10 29-36 2.0-15 41-60 1.0-10 10-29 2.0-10 10-29 2.0-10 29-36 2.0-15 29-36 2.0-15 36-41 2.0-15 29-36 2.0-15 36-41 2.0-15 36-41 2.0-15 41-60 1.0-10 0-3 3.0-15 38-81 1.0-15 15-21 0.0-10 10-2 3.0-15 21-60 0.0-6.0 0-2 3.0-15 26-38 1.0-15 26-38 1.0-15 19-26 1.0-15 26-38 1.0-15 10-18 4.6-12 10-18 4.6-12 10-18 4.6-12 10-18 4.6-12 10-2 3.0-15 27-34 5.5-14 34-38 4.8-12 34-38 4.8-12 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 27-43 0.0-15 38-815 2.0-15 15-21 0.0-10	capacity exchange capacity In

Table 25.--Chemical Properties of the Soils--Continued

Map symbol	Depth	,	Effective		Calcium
and soil name		,	cation-	reaction	carbon-
		capacity	exchange capacity	 	ate
	In	meg/100 g	meg/100 g	pH	Pct
	İ		İ	į -	į
670E:					
Keweenaw	0-2 2-4	3.0-15	 	4.5-6.5	0 0
	2-4 4-16	1.0-9.0	 	4.5-6.5	0
	16-20	0.0-15		4.5-6.5	0
İ	20-27	0.0-15	i	4.5-6.5	0
İ	27-43	0.0-15		4.5-6.5	0
	43-75	0.0-15		4.5-6.5	0
	75-80	0.0-15		5.1-6.5	0
Pence	 0-3	3.0-15	 	4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
j	8-15		2.0-15	4.5-6.0	0
	15-21	0.0-10		4.5-6.5	0
	21-60	0.0-6.0		4.5-6.5	0
671B:			 	 	1
Spoonerhill, stony	0-3	2.0-15		4.5-7.3	0
	3-12	0.0-15	i	4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
Spoonerhill	0-3	2.0-15	 	4.5-7.3	0
	3-12	0.0-15	i	4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
680B:					
Stanberry, stony	0-1	60-160	i	4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	4.0-9.0		4.5-6.5	0
	24-32 32-42	5.0-10	 	4.5-6.5	0 0
	42-80	1.0-6.0	 	5.6-7.3	0
					į
Pence, stony	0-3	3.0-15		4.5-7.3	0
	3-8	1.0-15		4.5-7.3	0
	8-15		2.0-15	4.5-6.0	
	15-21	0.0-10	 	4.5-6.5	0
	21 00				
683A:	ĺ	İ	İ	İ	İ
Tipler	0-3	5.0-15		4.5-7.3	0
	3-5	4.0-10		4.5-6.5	0
	5-19 19-26		2.0-15	4.5-6.0 5.1-6.5	1
		1.0-15	 	5.1-6.5	
	33-60	1		4.5-6.5	0
		İ	İ	İ	İ
706A:					
Winterfield	0-7 7-60	2.0-15	 	5.6-7.8	0 0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity	exchange	Soil reaction 	Calcium carbon- ate
	In	 meg/100 g	meq/100 g	рн	Pct
706A:		į	j	j	İ
Totagatic	0 - 4	3.0-10		5.1-6.5	0
	4-8	1.0-3.0		4.5-6.5	0
	8-17	1.0-3.0		4.5-6.5	0
	17-28 28-46	1.0-3.0	 	4.5-6.5	0
	46-70	1.0-3.0	l	4.5-6.5	0
	70-80	1.0-3.0		4.5-6.5	0
İ			ĺ	ĺ	İ
724A:		!	!		
Rib	0-7	8.0-35		4.5-7.3	0
	7-10	2.0-15		4.5-7.3	0
	10-32 32-35	1.0-25	 	4.5-7.3	0
	35-37	0.0-10	 	4.5-7.3	0
	37-60	0.0-6.0		5.5-8.4	0
İ					
Rock outcrop.			 	 	
726B:		İ	j	j	į
Sissabagama	0-10		2.0-15	4.5-7.3	0
I	10-31		1.0-10	4.5-6.5	0
	31-45	2.0-4.0		4.5-6.5	0
	45-80	2.0-4.0	 	5.1-7.3	0
733A:			 	 	
Wozny	0-3	100-155		4.5-7.3	0
	3-17	8.0-35		4.5-7.3	0
	17-37	3.0-15		4.5-7.3	0
	37-56 56-80	2.0-15	 	5.1-7.3	0
	30-80	0.0-10	 	3.1-0.3	0
771A:		İ		! 	İ
Lenroot	0 - 4	2.0-11	i	5.1-6.5	0
I	4-8	0.0-6.0		5.1-6.5	0
	8-14	0.0-6.0		5.1-6.5	0
	14-21	0.0-6.0		5.1-6.5	0
	21-80	0.0-6.0		5.1-7.3	0
827A:		1	 	 	
Scoba	0 - 9	5.0-20	 	4.5-7.3	0
	9-16	1.0-15		4.5-6.5	0
i	16-20		i	4.5-6.5	0
İ	20-26	2.0-15	i	4.5-6.5	0
I	26-31	0.0-10		4.5-6.5	0
	31-60	0.0-6.0		4.5-6.5	0
853C:			 	 	
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
I	4-13		3.0-15	4.5-6.0	0
I	13-19	'		5.1-6.5	0
	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation- exchange capacity		'	Calcium carbon- ate
	In	 meg/100 g	meg/100 g	рН	Pct
853C:					
Stinnett	0 - 4	6.0-20		4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
	7-18		3.0-15	4.5-6.0	0
	18-29 29-34		3.0-15	4.5-6.0	0
	34-41	1.0-10	 	4.5-6.5	0
	41-55	0.0-10	 	5.6-7.3	0
	55-80	0.0-15	l	5.6-7.3	0
i			! 		
Wozny	0-3	100-155		4.5-7.3	0
	3-17	8.0-35		4.5-7.3	0
	17-37	3.0-15	i	4.5-7.3	0
	37-56	2.0-15		5.1-7.3	0
	56-80	0.0-10		5.1-6.5	0
856B:					
Stinnett	0-4	6.0-20		4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
	7-18 18-29		3.0-15	4.5-6.0	0
	29-34	1.0-10	3.0-15	4.5-6.5	0
	34-41	1.0-10	l	4.5-6.5	0
i	41-55	0.0-10		5.6-7.3	0
	55-80	0.0-15		5.6-7.3	0
İ		İ	İ		i
857B:		İ	ĺ		İ
Frogcreek	0 - 4	5.0-20		4.5-7.3	0
	4-13		3.0-15	4.5-6.0	0
	13-19	1.0-15		5.1-6.5	
	19-32	1.0-15		5.1-6.5	0
	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10		6.1-7.3	0
857C:		1	l I	l I	
Frogcreek	0-4	5.0-20	 	 4.5-7.3	0
FIOGCIEEK	4-13		3.0-15	4.5-6.0	0
	13-19	1.0-15		5.1-6.5	0
	19-32	1.0-15		5.1-6.5	0
İ	32-46	1.0-15		5.1-6.5	0
	46-80	0.0-10	i	6.1-7.3	0
873B:					
Stanberry	0-1	60-160		4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	1	!	4.5-6.5	0
	24-32	5.0-10 3.0-6.0	 	4.5-6.5	!
	32-42 42-80	1.0-6.0	 	5.6-7.3	0
	±4-8U	1.0-0.0	ı I	J.0-/.3 	0
873C:			! 	! 	
Stanberry	0-1	60-160	 	4.5-6.5	0
<u>-</u>	1-3	4.0-10		4.5-6.5	0
		4.0-11		4.5-6.5	0
	19-24	1		4.5-6.5	
	24-32	5.0-10	i	4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth		Effective cation- exchange		Calcium carbon-
			capacity		400
	In	meq/100 g	meq/100 g	рН	Pct
873D: Stanberry	0-1	 60-160	 	 4.5-6.5	0
scamperly	1-3	4.0-10	 	4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
i	19-24	4.0-9.0	i	4.5-6.5	0
I	24-32	5.0-10		4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0
	42-80	1.0-6.0		5.6-7.3	0
905A:			 	 	
Cublake	0-3	1.0-8.0		4.5-6.5	0
i	3 - 4	j	0.0-10	3.5-6.0	0
I	4-23		2.0-10	3.5-6.0	0
	23-32		0.0-5.0	3.1-7.3	0
	32-40 40-48		0.0-5.0	3.1-7.3	0
	48-60	2.0-20	0.0-5.0	3.1-7.3	0 0
	10 00	2.0 20	! 	3.1 7.3	
926A:		İ	j		į
Flink	0-3	1.0-8.0		4.5-6.5	0
	3-6		2.0-10	3.5-6.0	0
	6-9 9-26		2.0-10	3.5-6.0	0
	26-35	0.0-3.0	2.0-10	5.1-7.3	0
	35-46	0.0-3.0		5.1-7.3	0
i	46-52	2.0-20		5.1-7.3	0
	52-80	2.0-20		5.1-7.3	0
943D:					
Stanberry	0-1	60-160	 	 4.5-6.5	0
beamberry	1-3	4.0-10	 	4.5-6.5	0
i	3-19	4.0-11	i	4.5-6.5	0
İ	19-24	4.0-9.0		4.5-6.5	0
	24-32	5.0-10		4.5-6.5	0
	32-42	3.0-6.0		4.5-6.5	0
	42-80	1.0-6.0	 	5.6-7.3	0
Greenwood	0-6		80-120	3.5-4.5	0
	6-60		150-200	3.5-4.5	0
948A:					
Billyboy	0 - 4	6.0-20 1.0-15	 	4.5-7.3	0
		1.0-15	 	4.5-6.5	
		2.0-15		4.5-6.5	,
i	26-30	2.0-15	i	4.5-6.5	0
I	30-35	2.0-10		4.5-6.5	0
	35-60	0.0-6.0		4.5-6.5	0
970C:			 	 	
Keweenaw	0-2	3.0-15	 	 4.5-6.5	0
	2-4	3.0-12		4.5-6.5	0
j	4-16	1.0-9.0	i	4.5-6.5	0
İ		0.0-15		4.5-6.5	
		0.0-15		4.5-6.5	:
	27-43	!		4.5-6.5	0
	43-75 75-80		 	4.5-6.5 5.1-6.5	0
	, 5-00	1 0.0-13	 I	0.3	0

Table 25.--Chemical Properties of the Soils--Continued

0-3 3-8 8-15 5-21 21-60 0-6 6-60	·	capacity meq/100 g	4.5-7.3 4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	ate Pct
0-3 3-8 8-15 25-21 21-60 0-6 6-60	meq/100 g 3.0-15 1.0-15 0.0-10 0.0-6.0	meq/100 g	4.5-7.3 4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15 0.0-10 0.0-6.0 	 2.0-15 80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15 0.0-10 0.0-6.0 	 2.0-15 80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
3-8 8-15 15-21 21-60 0-6 6-60	1.0-15 0.0-10 0.0-6.0 	 2.0-15 80-120	4.5-7.3 4.5-6.0 4.5-6.5 4.5-6.5	0 0 0 0 0
0-6 6-60 0-2 2-4	 0.0-10 0.0-6.0 	 80-120	4.5-6.0 4.5-6.5 4.5-6.5 3.5-4.5	0 0
0-6 6-60 0-2 2-4	0.0-6.0	 80-120	4.5-6.5	0
0-6 6-60 0-2 2-4		80-120	3.5-4.5	
6-60 0-2 2-4	!	!	!	 n
0-2 2-4	 	150-200		
2-4			3.5-4.5	0
2-4		 	 	
	3.0-15	 	 4.5-6.5	0
4-16	3.0-12		4.5-6.5	0
	1.0-9.0		4.5-6.5	0
L6-20	0.0-15		4.5-6.5	0
20-27	0.0-15		4.5-6.5	0
27-43	0.0-15		4.5-6.5	0
13-75	0.0-15		4.5-6.5	0
75-80	0.0-15	 	5.1-6.5 	0
0-3	3.0-15		4.5-7.3	0
3-8	1.0-15		4.5-7.3	0
8-15		2.0-15	4.5-6.0	0
15-21	0.0-10		4.5-6.5	0
21-60	0.0-6.0	 	4.5-6.5 	0
0 - 6		80-120	3.5-4.5	0
6-60		150-200	3.5-4.5	0
0-5	3.0-15		4.5-7.3	0
5-33	2.0-10		4.5-6.5	0
33-37	1.0-10		4.5-6.5	0
37-45	1.0-10		4.5-6.5	0
15-70	1.0-10		5.6-6.5	0
0-80	1.0-10	 	3.0-0.5	0
0-3	2.0-20		4.5-7.3	0
3-15			4.5-6.0	0
	!	!	!	0
	!		1	0
0-00			4.5-0.5	
		!		0
		!	1	0
		!		0
	1.0-10	 	5.6-6.5	0
	1.0-10		5.6-6.5	0
0 3				
	1	!		0 0
	1	1		0
		0.0-7.0	4.5-6.0	0
	!		4.5-6.5	0
	0-3 3-15 15-31 31-36 36-60 0-5 5-33 33-37 37-45 15-70 70-80 0-3 3-15 15-31	0-80		0-80 1.0-10 5.6-6.5 0-3 2.0-20 4.5-7.3 3-15 1.0-15 4.5-6.0 1.5-31 0.0-7.0 4.5-6.0 31-36 0.0-7.0 4.5-6.0 36-60 0.0-6.0 4.5-6.5 5-33 2.0-10 4.5-6.5 33-37 1.0-10 4.5-6.5 37-45 1.0-10 4.5-6.5 45-70 1.0-10 5.6-6.5 70-80 1.0-10 4.5-7.3 3-15 1.0-15 4.5-6.0 35-31 0.0-7.0 4.5-6.0 0-3 2.0-20 4.5-6.0 35-31 0.0-7.0 4.5-6.0

Table 25.--Chemical Properties of the Soils--Continued

			<u> </u>	<u> </u>	1
Map symbol and soil name	Depth	1	Effective		Calcium
and soll name		exchange capacity	exchange	reaction 	carbon-
	In	 meq/100 g	capacity meq/100 g	pH	Pct
10000		İ			İ
1080B: Spoonerhill	0-3	2.0-15	 	 4.5-7.3	0
	3-12	0.0-15		4.5-6.5	0
İ	12-16	0.0-15	i	4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46	0.0-15		5.6-6.5	0
	46-80	0.0-15	 	5.6-6.5	0
Spoonerhill, stony	0-3	2.0-15		4.5-7.3	0
	3-12	0.0-15		4.5-6.5	0
	12-16	0.0-15		4.5-6.5	0
	16-34	0.0-15		5.1-6.5	0
	34-46 46-80	0.0-15	 	5.6-6.5	0
	40-00	0.0-15	 	5.0-0.5	0
Cress	0-3	2.0-20		4.5-7.3	0
	3-15	1.0-15		4.5-6.0	0
	15-31		0.0-7.0	4.5-6.0	0
	31-36		0.0-7.0	4.5-6.0	0
	36-60	0.0-6.0	 	4.5-6.5	0
1653C:					İ
Stanberry	0-1	60-160		4.5-6.5	0
	1-3	4.0-10		4.5-6.5	0
	3-19	4.0-11		4.5-6.5	0
	19-24	4.0-9.0 5.0-10	 	4.5-6.5	0
	24-32 32-42	3.0-6.0	 	4.5-6.5	0
	42-80	1.0-6.0		5.6-7.3	0
			ĺ	ĺ	İ
Parkfalls	0-5 5-8	3.0-15	 2.0-15	4.5-6.5	0
	8-17		2.0-15	4.5-6.5	0
	17-30	1.0-15		4.5-6.5	0
İ	30-33	1.0-15	i	4.5-6.5	0
j	33-48	2.0-15		4.5-6.5	0
	48-80	1.0-15		5.6-7.3	0
Wozny	0-3	100-155	 	4.5-7.3	0
-	3-17	8.0-35	i	4.5-7.3	0
j	17-37	3.0-15		4.5-7.3	0
	37-56	2.0-15		5.1-7.3	0
	56-80	0.0-10		5.1-6.5	0
2015.			 		
Pits		İ	İ	İ	İ
2050.					
Landfill			 	 	
					į
3011A:					
Barronett	0-9 9-16	7.0-30	 	4.5-7.3	0
		1.0-15	 	4.5-6.5	0
	34-60	1	2.0-25	5.1-7.3	0
21052					
3125A: Meehan	0-5		 2.0-15	 3.5-7.3	0
	5-8		1.0-8.0		0
j	8-28		1.0-8.0		0
	28-60		0.0-4.0	3.5-7.3	0

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	1	Effective cation- exchange		Calcium
			capacity		
	In	meq/100 g	meq/100 g	рН	Pct
3126A:			 		
Wurtsmith	 0-9		2.0-14	3.5-5.5	0
	9-37		1.0-2.0	3.5-6.0	0
	37-60		1.0-2.0	3.5-7.3	0
3276A:	 		 	 	
Au Gres	0-2		80-120	4.5-7.3	0
	2-5		2.0-5.0	3.5-7.3	0
	5-8	i	2.0-5.0	4.5-6.0	0
	8-16		2.0-5.0	4.5-6.5	0
	16-28		2.0-5.0	3.5-7.3	0
	28-60 	1.0-2.0	 	4.5-7.3	0
3312B:					
Glendenning, very					
stony	0-5	3.0-17	 	5.1-7.3	0
	5-15 15-20	1.0-15	 	5.1-6.0 5.1-6.5	0 0
	20-26	1.0-15	 	5.1-6.5	0
	26-40	1.0-15	 	5.1-6.5	0
	40-65	1.0-15		5.1-6.5	0
	65-80	1.0-15	i	6.1-7.3	0
G1 1 1					
Glendenning	0-7 7-15	3.0-17 1.0-15	 	5.1-7.3	0 0
	15-20	1.0-15	 	5.1-6.5	0
	20-26	1.0-15	l	5.1-6.5	0
	26-40	1.0-15		5.1-6.5	0
	40-65	1.0-15	i	5.1-6.5	0
	65-80	1.0-15		6.1-7.3	0
3336A:	 		 	 	
Fenander	 0-9	5.0-10	 	5.1-7.3	0
	9-15	2.0-15	i	5.1-7.3	0
	15-27	2.0-15		5.1-7.3	0
	27-33	2.0-15		5.1-7.3	0
	33-80	2.0-20		5.1-7.3	0
3403A:	 		 	 	
Loxley	0-13	i	50-100	3.5-4.4	0
	13-60		50-120	3.5-4.4	0
Beseman	 0-36		 50-150	 3.5-4.4	 0
Debendii		3.0-15		3.5-7.3	
	ĺ	İ	İ	ĺ	İ
Dawson	0-8	1		3.5-4.4	•
	8-38	1	150-230		1
		10-25	 	3.5-4.4	
	10-00				
3424C:					
Frogcreek	0-4	5.0-20		4.5-7.3	'
	4-13	1		4.5-6.0	
		1.0-15	 	5.1-6.5	
		1.0-15	 	5.1-6.5	1
		0.0-10		6.1-7.3	0
	İ		İ		İ

Table 25.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	exchange capacity			Calcium carbon- ate
		<u> </u>	capacity		 D=t
	In	meq/100 g	meq/100 g	pH 	Pct
3424C:			! 		
Magroc	0-2	3.0-20	i	4.5-7.3	0
İ	2-11	1.0-15		4.5-6.5	0
	11-22	1.0-15		4.5-6.5	0
	22-30	1.0-15		4.5-6.5	0
	30-45	0.0-15		5.1-7.3	0
	45-50 50-80	0.0-15	 	5.1-7.3	0 0
	30-80		 	 	0
Stinnett	0-4	6.0-20	 	4.5-7.3	0
	4-7		3.0-15	4.5-6.0	0
i	7-18		3.0-15	4.5-6.0	0
İ	18-29		3.0-15	4.5-6.0	0
I	29-34	1.0-10		4.5-6.5	0
	34-41	1.0-10		4.5-6.5	0
	41-55	0.0-10		5.6-7.3	0
	55-80	0.0-15		5.6-7.3	0
Rock outcrop.			 	 	
Rock odderop.					
3446A:		j	j	İ	į
Newson	0-3		60-155	3.5-6.0	0
	3-8		1.0-7.0	3.5-6.0	0
	8-16		1.0-7.0	3.5-6.0	0
	16-22 22-60		1.0-7.0	3.5-6.0	0
	22-60	0.0-4.0	 	4. 5-6.5 	0
3448B:			 	 	
Grettum	0-3		2.0-15	3.5-7.3	0
İ	3-32		1.0-10	3.5-7.3	0
I	32-75		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
3448C:			 		
Grettum	0-3		2.0-15	3.5-7.3	0
ore count	3-32		1.0-10	3.5-7.3	0
	32-75		1.0-10	5.1-7.3	0
	75-80	1.0-9.0		5.1-7.3	0
I					
3516A:			!		
Slimlake	0-6	3.0-15		5.1-6.5	0
	6-17		3.0-15	5.1-6.5	0
		0.0-2.0	 	5.1-6.5 5.1-6.5	:
	53-80	'	l	5.1-6.5	0
i					
3629B:		j	j	İ	į
Perida	0 - 9	2.0-10		3.5-7.3	0
		2.0-10		3.5-7.3	0
		2.0-10		3.5-7.3	0
	45-60	1		3.5-7.8	:
	60-74 74-80	1	 	3.5-7.8	0 0
	00				
M-W. Miscellaneous water		 	 	 	;
w.		İ	į		İ
Water					1

Table 26.--Soil Moisture Status by Depth

(Depths of layers are in feet. Absence of an entry indicates that the feature is not a concern or that data were not estimated. See text for definitions of terms used in this table)

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
SOII Hame	group	<u> </u>	1	1	1	1	1		1	1	1	1	1
3A:		 				İ							
Totagatic	A/D	0.0-2.0:	0.0-2.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
-	i	Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	İ	2.0-6.7:	2.5-6.7:	1.0-6.7:		i	1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:		0.0-6.7:
		Wet	Wet	Wet			Wet	Wet	Wet	Wet	Wet		Wet
Bowstring	 A/D	 0.0-2.0:	0.0-2.5:	0.0-1.0:	 0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
.	i '	Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	İ	2.0-6.7:	2.5-6.7:	1.0-6.7:	i	i	1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:	i	0.0-6.7:
	į	Wet	Wet	Wet	į	į	Wet	Wet	Wet	Wet	Wet		Wet
Ausable	 A/D	 0.0-2.0:	0.0-2.5:	0.0-1.0:	 0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
	i	Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	į	2.0-6.7:	2.5-6.7:	1.0-6.7:	i	i	1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:	i	0.5-6.7:
	į	Wet	Wet	Wet	į	į	Wet	Wet	Wet	Wet	Wet	į	Wet
22A:													
Comstock	C	0.0-2.5:	0.0-2.5:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-2.5:	0.0-4.0:	0.0-5.0:	0.0-2.0:	0.0-1.0:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		2.5-3.0:	2.5-3.5:	2.5-5.0:	0.5-6.7:	1.0-6.7:	2.5-6.7:	2.5-6.7:	4.0-6.7:	5.0-6.7:	2.0-2.5:	1.0-2.5:	2.0-3.0:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
		3.0-6.7:	3.5-6.7:	5.0-6.7:							2.5-5.0:	2.5-5.5:	3.0-6.0:
		Moist	Moist	Moist							Moist	Moist	Moist
											5.0-6.7:	5.5-6.7:	6.0-6.7:
		 									Wet	Wet	Wet
24A:	İ			İ	i	i	i	İ	i		İ		
Poskin	C	0.0-3.0:	0.0-4.0:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7:	4.0-6.7:	2.5-6.7:	0.5-6.7:	1.0-6.7:	2.5-6.7:	3.5-6.7:	4.0-6.7:	3.0-6.7:	2.0-6.7:	1.0-6.7:	2.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
27A:		 											
Scott Lake	В	0.0-4.5:	0.0-5.5:	0.0-4.0:	0.0-2.5:	0.0-3.0:	0.0-4.5:	0.0-5.0:	0.0-5.5:	0.0-4.5:	0.0-4.0:	0.0-3.5:	0.0-4.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		4.5-6.7:	5.5-6.7:	4.0-6.7:	2.5-6.7:	3.0-6.7:	4.5-6.7:	5.0-6.7:	5.5-6.7:	4.5-6.7:	4.0-6.7:	3.5-6.7:	4.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet

Map symbol and	Hydro- logic	January	February	March	April	May	June	July	August	September	October	November	December
soil name	group	1	<u> </u>	1		1		1	1	1	1	1	1
28B:	İ		İ							I			
Haugen, very	İ	İ	j	i	į	j	ì	i	i	i	İ	İ	i
stony	C	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:					4.0-6.0:	4.5-6.0:
	!	ļ		Wet	Wet	Wet	Wet				!	Wet	Wet
				6.0-6.7:	6.0-6.7:	6.0-6.7:	6.0-6.7:					6.0-6.7:	6.0-6.7:
				Moist	Moist	Moist	Moist					Moist	Moist
Haugen	l c	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
naugen		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	i			2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:					4.0-6.0:	4.5-6.0:
	i	İ	i	Wet	Wet	Wet	Wet	i	i	i	İ	Wet	Wet
	İ	j	i	6.0-6.7:	6.0-6.7:	6.0-6.7:	6.0-6.7:	i	j		j	6.0-6.7:	6.0-6.7:
	ĺ	İ	İ	Moist	Moist	Moist	Moist	İ	İ	İ	İ	Moist	Moist
Rosholt, very	!	ļ			ļ	!	Ţ				!	ļ	
stony	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist								
Rosholt	 B	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
ROBHOIC	-	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	i												
28C:	i	İ	i	İ	i	İ	i	İ	İ	i	İ	i	
Haugen, very	İ	İ	j	i	į	j	ì	i	i	i	İ	İ	i
stony	В	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:					4.0-6.0:	4.5-6.0:
	-			Wet	Wet	Wet	Wet					Wet	Wet
	!			6.0-6.7:	6.0-6.7:	6.0-6.7:	6.0-6.7:					6.0-6.7:	6.0-6.7:
				Moist	Moist	Moist	Moist					Moist	Moist
Haugen	 C	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
naugen	-	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		MOISC	MOISC	2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:	MOISC	MOISC	MOISC	MOISC	4.0-6.0:	4.5-6.0:
		İ		Wet	Wet	Wet	Wet	i	i i	1	l	Wet	Wet
	i			6.0-6.7:	6.0-6.7:	6.0-6.7:	6.0-6.7:		i		i	6.0-6.7:	6.0-6.7:
	i	İ	i	Moist	Moist	Moist	Moist	İ		İ	İ	Moist	Moist
			1				1						
Rosholt, very													
stony	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
D1 - 1 -													
Rosholt	B	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September 	October 	November	Decembe
33B:	 												
Chetek	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
33C:	 												
Chetek	в 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
38A:	 												
Rosholt	B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
38B:													
Rosholt	B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
38C:													
Rosholt	B 	0.0-6.7: Moist											
38D:	 												
Rosholt	в 	0.0-6.7: Moist											
42D:													
Amery	B 	0.0-6.7: Moist											
43B:													
Antigo	B 	0.0-6.7: Moist											
43C:													
Antigo	B 	0.0-6.7: Moist											
43D:	 												
Antigo	В 	0.0-6.7: Moist											
48A:	 												
Brill	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-2.0: Moist	0.0-6.7: Moist						
	 				1.5-2.5: Wet	2.0-2.5: Wet							
	 				2.5-6.7: Moist	2.5-6.7:							

Table	26Soil	Moisture	Status	by	DepthContinued	

	Hydro- logic group	January 	February	March 	April	May	June	July 	August	September	October	November	Decembe
63A:	 				i	1	1		i	1			
Crystal Lake	В 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-5.0: Wet	0.0-3.0: Moist 3.0-6.7:	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.0: Wet	0.0-6.7: Moist
	 	 			5.0-6.7: Moist	 	 	 				3.0-6.7: Moist	
63B:	! 				i	1	1		1	i			
Crystal Lake	в 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-3.0: Moist	0.0-3.5: Moist	0.0-5.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-6.7: Moist
	 	 			2.0-5.0: Wet	3.0-6.7: Wet	3.5-6.7: Wet	5.5-6.7: Wet				2.5-3.0: Wet	
	 	 			5.0-6.7: Moist							3.0-6.7: Moist	
53C:	 	 											
Crystal Lake	' в 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-3.5: Moist	0.0-5.0: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	 			2.0-5.0: Wet	3.5-6.7: Wet	5.0-6.7: Wet						
	 	 	ļ		5.0-6.7: Moist								
63E:	 	 											
Crystal Lake	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	Moist 	Moist 	Moist	Moist 2.5-5.0: Wet	Moist 4.5-6.7: Wet	Moist	Moist	Moist	Moist 	Moist	Moist 	Moist
	 	 			5.0-6.7: Moist	wet							
54A:	 	l 											
Totagatic	A/D	0.0-2.0:	0.0-2.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	 	2.0-6.7: Wet	2.5-6.7: Wet	1.0-6.7: Wet			1.0-6.7: Wet	2.0-6.7: Wet	2.5-6.7: Wet	1.5-6.7: Wet	0.5-6.7: Wet		0.0-6.7: Wet
Winterfield	 A/D 	 0.0-2.0: Moist	0.0-2.0: Moist	 0.0-1.5: Moist	 0.0-0.5: Moist	0.0-1.5: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-2.0: Moist	0.0-3.0: Moist	0.0-3.0: Moist	0.0-2.0: Moist	0.0-2.0: Moist
	 	2.0-6.7:	2.0-6.7:	1.5-6.7:	0.5-6.7:	1.5-6.7:	2.0-6.7:	2.0-6.7:	2.0-6.7:	3.0-6.7:	3.0-6.7:	2.0-6.7:	2.0-6.7:
	ı İ	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
69B:	 	 											
Keweenaw	B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Sayner	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Vilas	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
69C:	 	 											
Keweenaw	B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Sayner	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist
Vilas	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
69E:	 			 									
Keweenaw	B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Sayner	 A 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist

Map symbol and soil name	Hydro- logic group	January 	February	March	April	May	June	July	August 	September	October	November	December
69E: Vilas	 A 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist
74B: Vilas	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 					 0.0-6.7: Moist 	 0.0-6.7: Moist 		 0.0-6.7: Moist
74C: Vilas	 A 	 0.0-6.7: Moist 		 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist
74D: Vilas	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
100B: Menahga	 A 	 0.0-6.7: Moist 		 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
69E:	 	 											
Vilas	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
74B:		 				İ			İ		İ		İ
Vilas	A A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
								MOISC	MOISC				
74C: Vilas	 A 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7:	 0.0-1.5: Dry 1.5-6.7:	 0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist	0.0-6.7: Moist
					į	į		Moist	Moist		į		
74D:	 	 											
Vilas	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
100B:	 												
Menahga	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
100C:	 	 											
Menahga	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
100D:	 	 											
Menahga	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
127D:	 	 							 				
Amery	 B	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Moist

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February	March	April	May	June	July	August 	September	October	November	Decembe:
127D:	 	 											
Rosholt	 B 	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
127E:	! 	l I			İ	İ	İ					Ì	
Amery	в 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
156B:	 												
Magnor, very												1	
stony	C	0.0-2.5:	1	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-1.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	 	2.5-3.5: Wet	2.5-3.5: Wet	1.5-3.5: Wet	0.5-3.5: Wet	1.0-3.5: Wet	2.5-3.5: Wet			3.0-3.5: Wet	2.0-3.5: Wet	1.0-3.5: Wet	1.5-3.5: Wet
	 	wet 3.5-6.7:	1	wet 3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:			3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist			Moist	Moist	Moist	Moist
Magnor	 C	 0.0-2.5:	0.0-2.5:	 0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-1.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		2.5-3.5:	2.5-3.5:	1.5-3.5:	0.5-3.5:	1.0-3.5:	2.5-3.5:			3.0-3.5:	2.0-3.5:	1.0-3.5:	1.5-3.5:
		Wet	Wet	Wet	Wet	Wet	Wet			Wet	Wet	Wet	Wet
	 	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist			3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist
157B:	 	 		 									
Freeon, very	j	ĺ	j	İ	j	Ì	İ	İ	İ	İ	İ	Ì	İ
stony	C	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.5-3.5:	1.0-3.5:	1.5-3.5:					2.5-3.5:	2.0-3.5:	2.5-3.5:
	 	 		Wet 3.5-6.7:	Wet 3.5-6.7:	Wet 3.5-6.7:					Wet 3.5-6.7:	Wet 3.5-6.7:	Wet 3.5-6.7:
				Moist	Moist	Moist					Moist	Moist	Moist
Freeon	 C	 0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	 0.0-6.7:	0.0-6.7:	 0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
	İ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	İ	j	i	2.5-3.5:	1.0-3.5:	1.5-3.5:	j	i	j	j	2.5-3.5:	2.0-3.5:	2.5-3.5:
				Wet	Wet	Wet					Wet	Wet	Wet
	 		ļ	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist					3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7:

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February	March 	April	May	June	July	August	September	October	November	December
1550													
157C:													
Freeon, very	l l C	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
stony	0	Moist	Moist	Moist	0.0-1.0: Moist	Moist	Moist	Moist	Moist	Moist	Moist	0.0-2.0: Moist	Moist
		MOIST	MOIST	2.5-3.5:	1.0-3.5:	1.5-3.5:	MOIST	Moist	Moist	MOIST	2.5-3.5:	2.0-3.5:	2.5-3.5:
				Wet	Wet	Wet					Wet	Wet	Wet
				wet 3.5-6.7:	3.5-6.7:	3.5-6.7:					3.5-6.7:	3.5-6.7:	3.5-6.7:
				Moist	Moist	Moist					Moist	Moist	Moist
Freeon	 C	0.0-6.7:	 0.0-6.7:	 0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	 0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.5-3.5:	1.0-3.5:	1.5-3.5:					2.5-3.5:	2.0-3.5:	2.5-3.5:
		İ	İ	Wet	Wet	Wet	İ	j	j	İ	Wet	Wet	Wet
				3.5-6.7:	3.5-6.7:	3.5-6.7:					3.5-6.7:	3.5-6.7:	3.5-6.7:
			İ	Moist	Moist	Moist				İ	Moist	Moist	Moist
160A:													
Oesterle	C	0.0-3.0:	0.0-4.0:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-2.0:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7:	4.0-6.7:	2.5-6.7:	0.5-6.7:	1.0-6.7:	2.5-6.7:	3.5-6.7:	4.0-6.7:	3.0-6.7:	2.0-6.7:	2.0-6.7:	2.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
182B:													
Padus	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
182C:			į	į									
Padus	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	1	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
192A:		İ		i	i	i	i	i	i	i	i	i	
Worcester	С	0.0-3.0:	0.0-4.0:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7:	4.0-6.7:	2.5-6.7:	0.5-6.7:	1.0-6.7:	2.5-6.7:	3.5-6.7:	4.0-6.7:	3.0-6.7:	2.0-6.7:	1.0-6.7:	2.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
193A:				 									
Minocqua	B/D	0.0-2.0:	0.0-2.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
		2.0-6.7:	2.5-6.7:	1.0-6.7:			1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:		0.5-6.7:
		Wet	Wet	Wet			Wet	Wet	Wet	Wet	Wet		Wet
215B:													
Pence	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February	March	April	May	June	July	August	September	October 	November	December
215C:		 										1	
Pence	B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
215D:					i	i	i	1				i	
Pence	в 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
315A:	İ		i		i	i	i					i	İ
Rib	B/D 	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
337A:												i	
Plover	C 	0.0-2.5: Moist 2.5-3.0: Wet 3.0-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-2.5: Moist 2.5-5.0: Wet 5.0-6.7: Moist	0.0-0.5: Moist 0.5-6.7: Wet 	0.0-1.0: Moist 1.0-6.7: Wet 	0.0-2.5: Moist 2.5-6.7: Wet 	0.0-2.5: Moist 2.5-6.7: Wet 	0.0-4.0: Moist 4.0-6.7: Wet 	0.0-5.0: Moist 5.0-6.7: Wet 	0.0-2.0: Moist 2.0-2.5: Wet 2.5-5.0: Moist	0.0-1.0: Moist 1.0-2.5: Wet 2.5-5.5: Moist	0.0-2.0: Moist 2.0-3.0: Wet 3.0-6.0: Moist
	 	 		 		 					5.0-6.7: Wet	5.5-6.7: Wet	6.0-6.7: Wet
368B:	İ					İ	İ	İ			İ	İ	İ
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Cress	 A 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist
368C:	 												
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Cress	 A 	 0.0-6.7: Moist 	 0.0-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist 	 0.0-6.7: Moist	 0.0-6.7: Moist

Map symbol and soil name	Hydro- logic group	January 	February	March 	April 	May 	June	July	August 	September	October	November	December
368D:	i	İ	i	i	i		i		1	i	i	i	
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Cress	 A 	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
371A:	l I		İ					l I		İ			
Croswell	A 	0.0-4.0: Moist 4.0-6.7: Wet 	Moist	0.0-3.5: Moist 3.5-6.7: Wet 	0.0-2.0: Moist 2.0-6.7: Wet 	0.0-2.5: Moist 2.5-6.7: Wet 	0.0-4.0: Moist 4.0-6.7: Wet 	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet 	0.0-3.5: Moist 3.5-6.7: Wet 	0.0-3.0: Moist 3.0-6.7: Wet 	0.0-3.5: Moist 3.5-6.7: Wet
380B:	İ		i	İ	İ	İ	i	İ	İ	i	İ	i	
Cress	A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	B	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
380C:	l I									l I			
Cress	A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	 B 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
380D:	l I			 					-				
Cress	A	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Rosholt	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
383B:	 	1	I	1	 				 	I I	1		
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
383C:		 											
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
383D:		! 			i	i	i		i	i		i	
Mahtomedi	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
396B:		! 								i			
Friendship	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.0: Moist 6.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-6.0: Moist 6.0-6.7: Wet	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Wurtsmith	A	 0.0-4.0: Moist 4.0-6.7: Wet 	0.0-5.0: Moist 5.0-6.7: Wet 	0.0-3.5: Moist 3.5-6.7: Wet 	0.0-2.0: Moist 2.0-6.7: Wet 	0.0-2.5: Moist 2.5-6.7: Wet 	0.0-4.0: Moist 4.0-6.7: Wet 	0.0-0.5: Dry 0.5-4.5: Moist 4.5-6.7: Wet	0.0-1.0: Dry 1.0-5.0: Moist 5.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet 	0.0-3.5: Moist 3.5-6.7: Wet 	0.0-3.0: Moist 3.0-6.7: Wet 	0.0-3.5: Moist 3.5-6.7: Wet
Grayling	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 0.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
397A:	İ		İ			İ	İ	i	İ	j	İ	j	
Perchlake	B 	0.0-3.0: Moist 3.0-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet
399B:	ļ												
Grayling	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 0.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Map symbol	Hydro-	January	February	March	April	May	June	July	August	September	October	November	December
and	logic												
soil name	group	1	1	<u> </u>		1	1			1	1	1	1
399C:		1					-					-	
Grayling	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	j	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
								0.0-6.7:	1.5-6.7:				
								Moist	Moist				
399D:	l I				l I	l I	l I	l I	l I			l I	
Grayling	 A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
3	İ	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
								0.0-6.7:	1.5-6.7:				
					!		!	Moist	Moist	İ	!	ļ	
405A:												1	
Lupton	∣ .la/n	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
2490011	, -	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	j	İ	į	İ	İ	j	j	j	j	İ	İ	j	j
Cathro	A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
Tawas	 A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
14#45	11, 5	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	j	İ	j	į	j	j	j	j	j	i	j	į	j
406A:				1									
Loxley	A/D	0.0-1.0:	0.0-1.0:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.5:
		Moist 1.0-6.7:	Moist 1.0-6.7:	Moist 0.5-6.7:	Wet 	Wet	Wet 	Moist 0.5-6.7:	Moist 0.5-6.7:	Moist 0.5-6.7:	Wet	Wet	Moist 0.5-6.7:
	I	Wet	Wet	Wet				Wet	Wet	Wet			Wet
					i		i					i	
407A:	j	İ	į	į	j	j	j	İ	j	i	İ	j	j
Seelyeville	A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
Markey	 a/n	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Markey	1,5	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	i				i		i						
410A:				1									
Seelyeville	A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
Cathro	 A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
0401120	, -	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	į	į	į	į	į	j	j	j	j	i	į	į	İ
412A:				ļ	ļ					Ţ	1	ļ	
Rifle	A/D	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	1	I	1	1	1	1	1	1	1	1	1	1	1

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September	October 	November	Decembe
			İ		İ	İ	İ	İ	İ	İ	İ	İ	Ī
412A:]			Į.	Ţ	Ţ		ļ		Ţ	
Tacoosh	A/D 	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet	0.0-6.7: Wet
415A:	İ	 				İ	i					i	
Greenwood	A/D 	0.0-1.0: Moist 1.0-6.0: Wet	0.0-1.0: Moist 1.0-6.0: Wet	0.0-0.5: Moist 0.5-6.0: Wet	0.0-6.0: Wet 	0.0-6.0: Wet 	0.0-6.0: Wet 	0.0-0.5: Moist 0.5-6.0: Wet	0.0-0.5: Moist 0.5-6.0: Wet	0.0-0.5: Moist 0.5-6.0: Wet	0.0-6.0: Wet 	0.0-6.0: Wet 	0.0-0.5: Moist 0.5-6.0: Wet
439B:	İ		İ	İ	i	i	i	i	i	i	İ	i	i
Graycalm	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Menahga	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
439C:	l I	 		 									
Graycalm	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Menahga	 A 	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-1.0: Dry	0.0-1.5: Dry	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:
	<u> </u> 	 	ļ	 	j	j	j	1.0-6.7: Moist	1.5-6.7: Moist	j			j
439D:	l I	 		 						I I		l I	
Graycalm	 A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7:	0.0-1.5: Dry 1.5-6.7:	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
								Moist	Moist				
Menahga	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-1.0: Dry 1.0-6.7: Moist	 0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 		0.0-6.7: Moist 	0.0-6.7: Moist

and	Hydro- logic group	January 	February	March 	April	May	June	July	August	September	October	November	December
		İ	İ]	İ	1	İ	<u> </u>]	İ]		[
441C:	_												
Freeon	В	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-1.0: Moist	0.0-1.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7:	0.0-6.7: Moist	0.0-2.5: Moist	0.0-2.0: Moist	0.0-2.5: Moist
	l I	MOIST	MOIST	2.5-3.5:	1.0-3.5:	1.5-3.5:	MOIST	Moist	Moist	MOIST	2.5-3.5:	2.0-3.5:	2.5-3.5:
				Wet	Wet	Wet					Wet	Wet	Wet
	 			3.5-6.7:	3.5-6.7:	3.5-6.7:				i	3.5-6.7:	3.5-6.7:	3.5-6.7:
				Moist	Moist	Moist					Moist	Moist	Moist
Cathro	 A/D	 0.0-6.7:	0.0-6.7:	 0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
442C:	i	i		İ	i	i	i	i	i	i	İ	i	i
Haugen	В	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:					4.0-6.0:	4.5-6.0:
				Wet	Wet	Wet	Wet			ļ	!	Wet	Wet
				6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist					6.0-6.7: Moist	6.0-6.7: Moist
j	İ	İ	İ	j	İ	j	İ	j	j	İ	İ	j	İ
Greenwood	A/D	0.0-1.0:	0.0-1.0:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
		1.0-6.7:	1.0-6.7:	0.5-6.7:				0.5-6.7:	0.5-6.7:	0.5-6.7:			0.5-6.7:
		Wet	Wet	Wet				Wet	Wet	Wet		l I	Wet
443D:													
Amery	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
Greenwood	A/D	0.0-1.0:	0.0-1.0:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.5:
	İ	Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
		1.0-6.7:	1.0-6.7:	0.5-6.7:				0.5-6.7:	0.5-6.7:	0.5-6.7:			0.5-6.7:
		Wet	Wet	Wet				Wet	Wet	Wet			Wet
461A:		i			i	i	i	i	i	i	i	ì	
Bowstring	A/D	0.0-2.0:	0.0-2.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
j		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
		2.0-6.7:	2.5-6.7:	1.0-6.7:			1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:		0.5-6.7:
		Wet	Wet	Wet			Wet	Wet	Wet	Wet	Wet		Wet
484A:													
Greenwood	A/D	0.0-1.0:	0.0-1.0:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
		1.0-6.7:	1.0-6.7:	0.5-6.7:				0.5-6.7:	0.5-6.7:	0.5-6.7:			0.5-6.7:
		Wet	Wet	Wet	ļ.		1	Wet	Wet	Wet	1		Wet

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September 	October 	November	Decembe
484A:	[<u> </u>									
Beseman	 A/D 	0.0-1.0: Moist 1.0-6.7:	Moist 1.0-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-0.5: Moist 0.5-6.7:	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7:
	 	Wet 	Wet	Wet				Wet	Wet	Wet			Wet
495B:	İ				j	į	i	į	i	i	į	İ	İ
Karlsborg	D 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-4.0: Wet	0.0-1.5: Moist 1.5-4.0: Wet	0.0-3.5: Moist 3.5-4.0: Wet	0.0-3.5: Moist 3.5-4.0: Wet	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
	 			4.0-6.7: Moist	4.0-6.7: Moist	4.0-6.7: Moist	4.0-6.7: Moist						
Grettum	 A 	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.0: Moist	 0.0-4.5: Moist	 0.0-6.0: Moist	 0.0-6.7: Moist	 0.0-1.0: Dry	 0.0-1.5: Dry	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist
				6.0-6.7: Wet	4.5-6.7: Wet	6.0-6.7: Wet		1.0-6.7: Moist	1.5-6.7: Moist				
Perida	 B 	 0.0-6.7: Moist 	0.0-6.7: Moist	 0.0-5.5: Moist 5.5-6.0:	 0.0-3.5: Moist 3.5-6.0:	 0.0-5.5: Moist 5.5-6.0:	 0.0-5.5: Moist 5.5-6.0:	 0.0-1.0: Dry 1.0-6.7:	 0.0-1.5: Dry 1.5-6.7:	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist
	 	 		Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Moist 	Moist 				
				MOISC	MOISC	Morse	MOISC						
495C:		 0.0-6.7:	0.0-6.7:	 0.0-3.5:	0.0-1.5:	0.0-3.5:	0.0-3.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
Karlsborg	D	0.0-6.7: Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	0.0-6.7: Moist	Moist	0.0-6.7: Moist	Moist
	 	 		3.5-4.0: Wet	1.5-4.0: Wet	3.5-4.0: Wet	3.5-4.0: Wet	1.0-6.7: Moist	1.5-6.7: Moist				
				4.0-6.7: Moist	4.0-6.7: Moist	4.0-6.7: Moist	4.0-6.7: Moist						
Grettum	 A 	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.0: Moist	0.0-4.5: Moist	0.0-6.0: Moist	0.0-6.7:	 0.0-1.0: Dry	 0.0-1.5: Dry	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist
	 			6.0-6.7: Wet	4.5-6.7: Wet	6.0-6.7: Wet		1.0-6.7: Moist	1.5-6.7: Moist				
Perida	 B	0.0-6.7:	0.0-6.7:	0.0-5.5:	0.0-3.5:	0.0-5.5:	0.0-5.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	Moist	Moist 	Moist 5.5-6.0: Wet	Moist 3.5-6.0: Wet	Moist 5.5-6.0: Wet	Moist 5.5-6.0: Wet	Dry 1.0-6.7: Moist	Dry 1.5-6.7: Moist	Moist 	Moist	Moist 	Moist
	 	 		Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Wet 6.0-6.7: Moist	Moist 	Moist 				

	Hydro- logic	January	February	March	April	May	June	July	August	September	October	November	Decembe
soil name	group	İ	i	į	j	i	j	i	j	i	İ	i	j
	I	1			1				1		1	1	
495D:													
Karlsborg	D	0.0-6.7:	1	0.0-3.5:	0.0-1.5:	0.0-3.5:	0.0-3.5:	0.0-1.0:	0.0-1.5:	1	0.0-6.7:	0.0-6.7:	0.0-6.7
		Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
				3.5-4.0:	1.5-4.0:	3.5-4.0:	3.5-4.0:	1.0-6.7:	1.5-6.7:				
	!	!	ļ	Wet	Wet	Wet	Wet	Moist	Moist		!	!	
	!			4.0-6.7:	4.0-6.7:	4.0-6.7:	4.0-6.7:						
				Moist	Moist	Moist	Moist						
Grettum	l I A	0.0-6.7:	0.0-6.7:	0.0-6.0:	0.0-4.5:	0.0-6.0:	0.0-6.7:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7
		Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
	i			6.0-6.7:	4.5-6.7:	6.0-6.7:		1.0-6.7:	1.5-6.7:				
	İ	İ	İ	Wet	Wet	Wet		Moist	Moist	i	İ		
Perida	В	0.0-6.7:	0.0-6.7:	0.0-5.5:	0.0-3.5:	0.0-5.5:	0.0-5.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
				5.5-6.0: Wet	3.5-6.0: Wet	5.5-6.0: Wet	5.5-6.0: Wet	1.0-6.7: Moist	1.5-6.7: Moist				
	 			wet 6.0-6.7:	wet 6.0-6.7:	wet 6.0-6.7:	Wet 6.0-6.7:	Moist	Moist				
	 			Moist	Moist	0.0-6.7:	Moist						
	 			MOISC	MOISC	MOISC	MOISC						
497A:	İ	İ							i	i	İ	i	
Meenon	C	0.0-2.5:	0.0-3.0:	0.0-1.5:	0.0-0.5:	0.0-0.5:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-1.5:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		2.5-3.5:	3.0-3.5:	1.5-4.5:	0.5-4.5:	0.5-4.5:	1.5-4.5:				2.0-3.5:	1.5-3.5:	2.0-3.5:
		Wet	Wet	Wet	Wet	Wet	Wet				Wet	Wet	Wet
		3.5-6.7:	1	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:				3.5-6.7:	3.5-6.7:	3.5-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist				Moist	Moist	Moist
515A:	 	1									1		
Manitowish	В	0.0-4.5:	0.0-5.5:	0.0-4.0:	0.0-2.5:	0.0-3.0:	0.0-4.5:	0.0-5.0:	0.0-5.5:	0.0-4.5:	0.0-4.0:	0.0-3.5:	0.0-4.0:
	ĺ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		4.5-6.7:	5.5-6.7:	4.0-6.7:	2.5-6.7:	3.0-6.7:	4.5-6.7:	5.0-6.7:	5.5-6.7:	4.5-6.7:	4.0-6.7:	3.5-6.7:	4.0-6.7:
	ļ	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
521A:	 	1		 						l I	1		
Dody	 C/D	0.0-0.5:	0.0-1.5:	0.0-4.0:	0.0-4.0:	0.0-4.0:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-2.5:	0.0-0.5:	0.0-4.0:	0.0-4.0:
-	İ	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Wet
	İ	0.5-4.0:	1.5-4.0:	4.0-6.7:	4.0-6.7:	4.0-6.7:	1.0-4.0:	2.0-4.0:	2.5-4.0:	2.5-4.0:	0.5-4.0:	4.0-6.7:	4.0-6.7:
	İ	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Wet	Wet	Wet	Moist	Moist
		4.0-6.7:	4.0-6.7:	j		i	4.0-6.7:	4.0-6.7:	4.0-6.7:	4.0-6.7:	4.0-6.7:	i	
	ļ	Moist	Moist	ļ	1		Moist	Moist	Moist	Moist	Moist		!
524E:	 												
Rock outcrop.	İ			1		i	i					1	
	i	i	i	i	i	i	i	i	i	i	i	i	i

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February 	March 	April 	May 	June 	July	August 	September 	October	November	Decembe
524E:	 	 											
Frogcreek	 B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet	0.0-1.0: Moist 1.0-3.5: Wet	0.0-1.5: Moist 1.5-3.5: Wet	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet	0.0-2.0: Moist 2.0-3.5: Wet	0.0-2.5: Moist 2.5-3.5: Wet
	 	 		3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist			j		3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist
Metonga	 B 	 0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist	0.0-2.3: Moist
542B:	 												
Haugen, very								ļ		!	!		!
stony	В	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.0-6.0:	2.0-6.0: Wet	3.0-6.0: Wet	4.5-6.0: Wet					4.0-6.0: Wet	4.5-6.0: Wet
	 	 		Wet 6.0-6.7:	wet 6.0-6.7:	wet 6.0-6.7:	wet 6.0-6.7:					wet 6.0-6.7:	Wet 6.0-6.7:
	! !			Moist	Moist	Moist	Moist					Moist	Moist
Haugen	 B	 0.0-6.7:	 0.0-6.7:	 0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	 	 		2.0-6.0: Wet	2.0-6.0: Wet	3.0-6.0: Wet	4.5-6.0: Wet					4.0-6.0: Wet	4.5-6.0: Wet
	j I	 	i	6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist	i	j	i		6.0-6.7: Moist	6.0-6.7: Moist
542C:	 	 											
Haugen, very													
stony	В	0.0-6.7:	1	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	 	 		2.0-6.0: Wet	2.0-6.0: Wet	3.0-6.0: Wet	4.5-6.0: Wet					4.0-6.0: Wet	4.5-6.0: Wet
	 			6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7: Moist					6.0-6.7: Moist	6.0-6.7: Moist
Haugen	 B	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-4.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-4.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	ļ			2.0-6.0:	2.0-6.0:	3.0-6.0:	4.5-6.0:					4.0-6.0:	4.5-6.0:
		ļ.	1	Wet	Wet	Wet	Wet	İ	İ	ļ	ļ	Wet	Wet
	 	 		6.0-6.7: Moist	6.0-6.7: Moist	6.0-6.7:	6.0-6.7:					6.0-6.7:	6.0-6.7: Moist

Map symbol and soil name	Hydro- logic group	January 	February	March 	April	May	June	July	August	September	October	November	Decembe
			1		1	1		1					[
543B: Anigon	 B 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist
543C2:	 	 				I I		l I		İ			
Anigon	B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
544F:	İ	! 		İ	i	i	i	i		i	i	i	
Menahga	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
Mahtomedi	 A 	 0.0-6.7: Moist 	0.0-6.7: Moist 	 0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
555A:	 	 				I I		l I		İ			
Fordum	D 	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
574B:	İ		İ	İ	i	i	i	i		i	i	i	İ
Sayner	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
574C:	į	İ	j	į	j	i	j	i	j	j	i	i	į
Sayner	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist
574E:		 											
Sayner	A 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February	March 	April	May 	June	July 	August	September	October	November	Decembe:
DOIL Hame	Aronb	<u> </u>	1	1	1	1			I	1	<u> </u>	1	1
579B:	i	İ				i				i	i		
Parkfalls	С	0.0-2.5:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-1.5:
	İ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	İ	2.5-3.5:	2.5-3.5:	1.5-3.5:	0.5-3.5:	1.0-3.5:	2.5-3.5:			3.0-3.5:	2.0-3.5:	1.0-3.5:	1.5-3.5:
		Wet	Wet	Wet	Wet	Wet	Wet			Wet	Wet	Wet	Wet
		3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:			3.5-6.7:	3.5-6.7:	3.5-6.7:	3.5-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist			Moist	Moist	Moist	Moist
600A:		 											
Haplosaprists	D	0.0-6.7:	0.0-6.7:	0.0-6.0:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
Psammaquents	 D	0.0-6.7:	0.0-6.7:	0.0-6.0:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	į	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
615B:	 	 											
Cress	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
615C:		 											
Cress	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
615D:	 												
Cress	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
623A:													
Capitola	B/D	0.0-1.5:	0.0-1.5:	0.0-1.0:	0.0-2.5:	0.0-2.5:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-1.5:	0.0-1.0:	0.0-2.5:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	!	1.5-2.5:	1.5-2.5:	1.0-2.5:	2.5-6.7:	2.5-6.7:	1.5-2.5:			1.5-2.5:	1.0-2.5:	2.5-6.7:	0.5-2.5:
		Wet	Wet	Wet	Moist	Moist	Wet			Wet	Wet	Moist	Wet
		2.5-6.7:	2.5-6.7:	2.5-6.7:			2.5-6.7:			2.5-6.7:	2.5-6.7:		2.5-6.7:
		Moist	Moist	Moist		l I	Moist			Moist	Moist		Moist
624A:													
Ossmer	C	0.0-3.0:	0.0-4.0:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-2.0:	0.0-2.0:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7:	4.0-6.7:	2.5-6.7:	0.5-6.7:	1.0-6.7:	2.5-6.7:	3.5-6.7:	4.0-6.7:	3.0-6.7:	2.0-6.7:	2.0-6.7:	2.0-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February	March	April	May	June	July	August	September	October	November	December
632A:	 	 											
Aftad	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-3.0: Moist	0.0-3.5: Moist	0.0-5.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-6.7: Moist
	 	j I	j	j l	2.0-5.0: Wet	3.0-6.7: Wet	3.5-6.7: Wet	5.5-6.7: Wet				2.5-3.0: Wet	i
	 	 			5.0-6.7: Moist							3.0-6.7: Moist	
632B:	İ												
Aftad	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-3.0:	0.0-3.5:	0.0-5.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
					2.0-5.0: Wet	3.0-6.7:	3.5-6.7:	5.5-6.7:				2.5-3.0: Wet	
	 	 			wet 5.0-6.7:	Wet	Wet	Wet 				wet 3.0-6.7:	
	 				Moist							Moist	
632C:													
Aftad	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-3.5:	0.0-5.0:	5.5-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Wet	Moist	Moist	Moist	Moist	Moist
	 	 			2.0-5.0: Wet	3.5-6.7: Wet	5.0-6.7: Wet						
	 				5.0-6.7: Moist								
633F:	 	 	1									1	
Pence	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	i I	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
Padus	 B	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
648B:	 	 											
Sconsin	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
					1.5-2.5:								
	 	 		1	Wet 2.5-6.7:								
	 			 	Moist								
670C:	 	 											
Keweenaw	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	 	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
Pence	В	0.0-6.7:	1	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	I	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February	March 	April	May	June	July	August 	September 	October 	November	December
670E:	 	 											
Keweenaw	 A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence	 B 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist
671B:	 	 											
Spoonerhill, stony	 A 	 0.0-6.7: Moist	Moist	 0.0-6.7: Moist	 0.0-2.0: Moist	 0.0-2.5: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-2.5: Moist	 0.0-6.7: Moist
	 	 		 	2.0-3.5: Wet 3.5-6.7:	2.5-3.5: Wet 3.5-6.7:						2.5-3.5: Wet 3.5-6.7:	
	į i	 -	į	į	Moist	Moist	į	į		į	į	Moist	į
Spoonerhill	 A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.0: Moist	0.0-2.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-2.5: Moist	0.0-6.7: Moist
	 	 		 	2.0-3.5: Wet 3.5-6.7:	2.5-3.5: Wet 3.5-6.7:						2.5-3.5: Wet 3.5-6.7:	
					Moist	Moist						Moist	
680B:		 											
Stanberry, stony	C	0.0-6.7:	,	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
	 	Moist 	Moist 	Moist 	Moist 2.0-3.5: Wet	Moist 2.5-3.5: Wet	Moist 	Moist 	Moist 	Moist 	Moist	Moist 2.5-3.5: Wet	Moist
	 	 		 	3.5-6.7: Moist	3.5-6.7: Moist						3.5-6.7: Moist	
Pence, stony	 B 	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
683A:	 	 		 									
Tipler	В	0.0-4.5:	0.0-5.5:	0.0-4.0:	0.0-2.5:	0.0-3.0:	0.0-4.5:	0.0-5.0:	0.0-5.5:	0.0-4.5:	0.0-4.0:	0.0-3.5:	0.0-4.0:
	ĺ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	 	4.5-6.7: Wet	5.5-6.7: Wet	4.0-6.7: Wet	2.5-6.7: Wet	3.0-6.7: Wet	4.5-6.7: Wet	5.0-6.7: Wet	5.5-6.7: Wet	4.5-6.7: Wet	4.0-6.7: Wet	3.5-6.7: Wet	4.0-6.7: Wet
706A:	 	 											
Winterfield	A/D	0.0-2.0:	0.0-2.0:	0.0-1.5:	0.0-0.5:	0.0-1.5:	0.0-2.0:	0.0-2.0:	0.0-2.0:	0.0-3.0:	0.0-3.0:	0.0-2.0:	0.0-2.0:
	, , <u>-</u>	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	į	2.0-6.7:		1.5-6.7:	0.5-6.7:	1.5-6.7:	2.0-6.7:	2.0-6.7:	2.0-6.7:	3.0-6.7:	3.0-6.7:	2.0-6.7:	2.0-6.7:
	I.	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet

Moist

and	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September 	October 	November	Decembe:
			ļ		İ	1	ļ	Ţ	İ	Ţ		ļ	
706A:													
Totagatic	D	0.0-2.0: Moist	0.0-2.5: Moist	0.0-1.0: Moist		0.0-6.7:	0.0-1.0: Moist	0.0-2.0: Moist	0.0-2.5: Moist	0.0-1.5: Moist	0.0-0.5: Moist	0.0-6.7:	0.0-0.5: Moist
			MOIST 2.5-6.7:	Moist 1.0-6.7:		Wet	Moist 1.0-6.7:	Moist 2.0-6.7:	Moist 2.5-6.7:	Moist 1.5-6.7:	0.5-6.7:	Wet	0.0-6.7:
	 	2.0-6.7: Wet	2.5-6.7: Wet	Wet			Wet	2.0-6.7: Wet	2.5-6./: Wet	Wet	Wet		Wet
	į	İ	į	İ	İ	į	į	į	İ	j	İ	İ	į
724A:	ļ .												
Rib	B/D	0.0-2.0:	0.0-2.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-1.0:	0.0-2.0:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-6.7:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
		2.0-6.7:	2.5-6.7:	1.0-6.7:			1.0-6.7:	2.0-6.7:	2.5-6.7:	1.5-6.7:	0.5-6.7:		0.5-6.7:
	 	Wet	Wet	Wet			Wet	Wet	Wet	Wet	Wet		Wet
Rock outcrop.													
726B:	 												
Sissabagama	A	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-3.0:	0.0-3.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-6.7:
-	İ	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
	İ	i	i	j	2.5-5.0:	3.0-6.7:	3.5-6.7:	1.0-5.5:	1.5-6.7:		j	4.0-4.5:	i
	İ	İ	j	İ	Wet	Wet	Wet	Moist	Moist	i	İ	Wet	İ
	İ			j	5.0-6.7:	i		5.5-6.7:	i			4.5-6.7:	i
	į	į	į	į	Moist	į	į	Wet	į	į	į	Moist	į
733A:		 											1
Wozny	B/D	0.0-1.5:	0.0-1.5:	0.0-1.0:	0.0-3.5:	0.0-3.5:	0.0-1.5:	0.0-3.0:	0.0-6.7:	0.0-1.5:	0.0-1.0:	0.0-3.5:	0.0-0.5:
-	İ	Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
	İ	1.5-3.5:	1.5-3.5:	1.0-3.5:	3.5-6.7:	3.5-6.7:	1.5-3.5:	3.0-3.5:	i	1.5-3.5:	1.0-3.5:	3.5-6.7:	0.5-3.5:
	İ	Wet	Wet	Wet	Moist	Moist	Wet	Wet	İ	Wet	Wet	Moist	Wet
	Ì	3.5-6.7:	3.5-6.7:	3.5-6.7:			3.5-6.7:	3.5-6.0:		3.5-6.7:	3.5-6.7:		3.5-6.7:
		Moist	Moist	Moist			Moist	Moist		Moist	Moist		Moist
771A:	l l												
Lenroot	A	0.0-4.0:	0.0-5.0:	0.0-3.5:	0.0-2.0:	0.0-2.5:	0.0-4.0:	0.0-0.5:	0.0-1.0:	0.0-4.0:	0.0-3.5:	0.0-3.0:	0.0-3.5:
	Ì	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
	İ	4.0-6.7:	5.0-6.7:	3.5-6.7:	2.0-6.7:	2.5-6.7:	4.0-6.7:	0.5-4.5:	1.0-5.0:	4.0-6.7:	3.5-6.7:	3.0-6.7:	3.5-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Moist	Moist	Wet	Wet	Wet	Wet
								4.5-6.7: Wet	5.0-6.7: Wet				
827A:		 											

Moist

Moist

Moist

Wet

4.0-6.7:

Moist

Wet

2.0-6.7:

Moist

Wet

Moist

Wet

4.0-6.7: |5.5-6.7:

Moist

Moist

Moist

Moist

Moist

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February 	March 	April	May	June	July	August	September 	October	November	December
853C:		[
Frogcreek	В	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
	i	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	İ	i	i	2.5-3.5:	1.0-3.5:	1.5-3.5:		i	i	i	2.5-3.5:	2.0-3.5:	2.5-3.5:
	į	į	j	Wet	Wet	Wet	i	į	i	į	Wet	Wet	Wet
	İ	j		3.5-6.7:	3.5-6.7:	3.5-6.7:		j		j	3.5-6.7:	3.5-6.7:	3.5-6.7:
				Moist	Moist	Moist					Moist	Moist	Moist
Stinnett	 C	0.0-2.5:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-3.0:	0.0-6.7:	0.0-6.7:	0.0-3.5:	0.0-2.0:	0.0-1.0:	0.0-1.5:
	İ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	İ	2.5-4.5:	2.5-4.5:	1.5-4.5:	0.5-4.5:	1.0-4.5:	3.0-4.5:	j		3.5-4.5:	2.0-4.5:	1.0-4.5:	1.5-4.5:
	İ	Wet	Wet	Wet	Wet	Wet	Wet	j	İ	Wet	Wet	Wet	Wet
		4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:			4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist			Moist	Moist	Moist	Moist
Wozny	B/D	0.0-1.5:	0.0-1.5:	0.0-1.0:	0.0-3.5:	0.0-3.5:	0.0-1.5:	0.0-3.0:	0.0-6.7:	0.0-1.5:	0.0-1.0:	0.0-3.5:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Moist	Moist	Moist	Moist	Moist	Wet	Moist
		1.5-3.5:	1.5-3.5:	1.0-3.5:	3.5-6.7:	3.5-6.7:	1.5-3.5:	3.0-3.5:		1.5-3.5:	1.0-3.5:	3.5-6.7:	0.5-3.5:
		Wet	Wet	Wet	Moist	Moist	Wet	Wet		Wet	Wet	Moist	Wet
		3.5-6.7:	3.5-6.7:	3.5-6.7:			3.5-6.7:	3.5-6.0:		3.5-6.7:	3.5-6.7:		3.5-6.7:
		Moist	Moist	Moist			Moist	Moist		Moist	Moist		Moist
856B:													
Stinnett	C	0.0-2.5:	1	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-3.0:	0.0-6.7:	0.0-6.7:	0.0-3.5:	0.0-2.0:	0.0-1.0:	0.0-1.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		2.5-4.5:	1	1.5-4.5:	0.5-4.5:	1.0-4.5:	3.0-4.5:			3.5-4.5:	2.0-4.5:	1.0-4.5:	1.5-4.5:
		Wet	Wet	Wet	Wet	Wet	Wet			Wet	Wet	Wet	Wet
		4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:			4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist			Moist	Moist	Moist	Moist
857B:	İ												
Frogcreek	В	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.5-3.5:	1.0-3.5:	1.5-3.5:					2.5-3.5:	2.0-3.5:	2.5-3.5:
		ļ		Wet	Wet	Wet					Wet	Wet	Wet
				3.5-6.7:	3.5-6.7:	3.5-6.7:					3.5-6.7:	3.5-6.7:	3.5-6.7:
		 		Moist	Moist	Moist					Moist	Moist	Moist
857C:													
Frogcreek	B	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-2.0:	0.0-2.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
				2.5-3.5:	1.0-3.5:	1.5-3.5:					2.5-3.5:	2.0-3.5:	2.5-3.5:
		ļ		Wet	Wet	Wet	Ţ	-	1	Į.	Wet	Wet	Wet
	!			3.5-6.7:	3.5-6.7:	3.5-6.7:					3.5-6.7:	3.5-6.7:	3.5-6.7:
				Moist	Moist	Moist					Moist	Moist	Moist

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September 	October 	November	Decembe
		[T	T	1	1	Τ	1	1	1	
373B:		1									1		
Stanberry	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	1	0.0-6.7:	0.0-2.5:	0.0-6.7:
!		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
ļ					2.0-3.5:	2.5-3.5:						2.5-3.5:	
,					Wet	Wet						Wet	
,					3.5-6.7:	3.5-6.7:						3.5-6.7:	
					Moist	Moist						Moist	
373C:	 	 				l I							
Stanberry	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
	į	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
,	į			i	2.0-3.5:	2.5-3.5:	i	i	i	i	j	2.5-3.5:	j
,	į	į	İ	İ	Wet	Wet	i	i	j	İ	i	Wet	İ
;	į				3.5-6.7:	3.5-6.7:					j	3.5-6.7:	j
ļ	į	į	į	į	Moist	Moist	į	į	į	į	į	Moist	į
373D:	 	 				l I							
Stanberry	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
	į	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	į	j		j	2.0-3.5:	2.5-3.5:	i	i	i	j	j	2.5-3.5:	j
,	į	į	İ	İ	Wet	Wet	i	i	j	İ	i	Wet	İ
,	į			i	3.5-6.7:	3.5-6.7:	i	i	i	i	j	3.5-6.7:	j
ļ	į	į	į	į	Moist	Moist	į	į	į	į	į	Moist	į
905A:	 	 	 			l I							
Cublake	В	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-3.0:	0.0-3.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-4.0:	0.0-6.7:
;	į	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
;	į	j			2.5-5.0:	3.0-6.7:	3.5-6.7:	1.0-5.5:	1.5-6.7:	i	j	4.0-4.5:	j
;	į	Ì	İ	İ	Wet	Wet	Wet	Moist	Moist	İ	Ì	Wet	İ
· ·	ĺ				5.0-6.7:			5.5-6.7:				4.5-6.7:	
j			į		Moist	į		Wet	į		İ	Moist	
26A:	 	[[
Flink	В	0.0-3.5:	0.0-3.5:	0.0-2.5:	0.0-1.0:	0.0-1.5:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.5:	0.0-2.5:	0.0-2.0:	0.0-2.5:
;		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
,		3.5-4.5:	3.5-4.5:	2.5-4.5:	1.0-4.5:	1.5-4.5:	2.5-4.5:	3.5-4.5:	4.0-4.5:	3.5-4.5:	2.5-4.5:	2.0-4.5:	2.5-4.5:
;	İ	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
;	İ	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:	4.5-6.7:
	I	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January	February	March	April	May	June	July	August	September	October	November	December
943D:	 												
Stanberry	 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.0: Moist 2.0-3.5: Wet	0.0-2.5: Moist 2.5-3.5: Wet	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet	0.0-6.7: Moist
	 				3.5-6.7: Moist	3.5-6.7: Moist						3.5-6.7: Moist	
Greenwood	 A/D 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
948A:									i	i		i	
Billyboy	B 	0.0-4.5: Moist 4.5-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-3.0: Moist 3.0-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-5.0: Moist 5.0-6.7: Wet	0.0-5.5: Moist 5.5-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet	0.0-3.5: Moist 3.5-6.7: Wet	0.0-4.0: Moist 4.0-6.7: Wet
970C:													
Keweenaw	A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Greenwood	 A/D 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
970E:													
Keweenaw	A 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist
Pence	 B 	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist
Greenwood	 A/D 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-1.0: Moist 1.0-6.7: Wet	 0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	 0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	January 	February 	March 	April 	May 	June 	July 	August 	September 	October 	November	December
1070C:		 		 									
Fremstadt	A 	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-1.5: Dry	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist	0.0-6.0: Moist
									Moist				
Cress	 A 	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist	0.0-6.7: Moist	 0.0-6.7: Moist	 0.0-6.7: Moist
1070D:		 											
Fremstadt	A	0.0-6.0:		0.0-6.0:	0.0-6.0:	0.0-6.0:	0.0-6.0:	0.0-6.0:	0.0-1.5:	0.0-6.0:	0.0-6.0:	0.0-6.0: Moist	0.0-6.0:
		Moist 	Moist 	Moist 	Moist 	Moist 	Moist 	Moist 	Dry 1.5-6.0: Moist	Moist 	Moist 	Moist 	Moist
Cress	 A	 0.0-6.7:	0.0-6.7:	 0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
1080B:		 		 									
Spoonerhill	A	0.0-6.7:	1	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
					1	2.5-3.5: Wet						2.5-3.5: Wet	
		 		 	Wet 3.5-6.7: Moist	Wet 3.5-6.7: Moist						wet 3.5-6.7: Moist	
Spoonerhill,	 	 											
stony	A	0.0-6.7:	1	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		 			2.0-3.5: Wet	2.5-3.5: Wet						2.5-3.5: Wet	
		 		 	3.5-6.7: Moist	3.5-6.7: Moist			j			3.5-6.7: Moist	
Cress	 A	 0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
L653C:	 	 					i		i i		İ	i	
Stanberry	 B	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.5:	0.0-6.7:
-		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		i	i		2.0-3.5:	2.5-3.5:	i		i		i	2.5-3.5:	i
			!	!	Wet	Wet	ļ		ļ		ļ	Wet	
	 	 			3.5-6.7: Moist	3.5-6.7: Moist						3.5-6.7: Moist	

Table 26.--Soil Moisture Status by Depth--Continued

	Hydro- logic group	 January 	February 	March 	April	May	June	July	August	 September 	October	November	Decembe:
1653C:	 	 											
Parkfalls	c 	0.0-2.5: Moist	0.0-2.5: Moist	0.0-1.5: Moist	0.0-0.5: Moist	0.0-1.0: Moist	0.0-2.5: Moist	0.0-6.7: Moist	0.0-6.7: Moist	0.0-3.0: Moist	0.0-2.0: Moist	0.0-1.0: Moist	0.0-1.5: Moist
	 	2.5-3.5: Wet 3.5-6.7:	2.5-3.5: Wet 3.5-6.7:	1.5-3.5: Wet 3.5-6.7:	0.5-3.5: Wet 3.5-6.7:	1.0-3.5: Wet 3.5-6.7:	2.5-3.5: Wet 3.5-6.7:			3.0-3.5: Wet 3.5-6.7:	2.0-3.5: Wet 3.5-6.7:	1.0-3.5: Wet 3.5-6.7:	1.5-3.5: Wet 3.5-6.7:
	 	3.5-6./: Moist 	Moist	Moist	Moist	Moist	Moist			Moist	Moist	3.5-6.7: Moist	Moist
Wozny	 B/D 	0.0-1.5: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-3.5: Wet	0.0-3.5: Wet	0.0-1.5: Moist	0.0-3.0: Moist	0.0-6.7: Moist	0.0-1.5: Moist	0.0-1.0: Moist	0.0-3.5: Wet	0.0-0.5: Moist
	 	1.5-3.5: Wet	1.5-3.5: Wet	1.0-3.5: Wet	3.5-6.7: Moist	3.5-6.7: Moist	1.5-3.5: Wet	3.0-3.5: Wet		1.5-3.5: Wet	1.0-3.5: Wet	3.5-6.7: Moist	0.5-3.5: Wet
	 	3.5-6.7: Moist	3.5-6.7: Moist	3.5-6.7: Moist			3.5-6.7: Moist	3.5-6.0: Moist		3.5-6.7: Moist	3.5-6.7: Moist		3.5-6.7: Moist
2015. Pits	 	 											
2050. Landfill	 	 											
3011A:	 	 											
Barronett	B/D	0.0-1.5:	0.0-5.5:	0.0-1.0:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-4.0:	0.0-1.5:	0.0-2.5:	0.0-0.5:
		Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
		1.5-2.5:	5.5-6.7:	1.0-2.5:				2.0-6.7:	2.0-6.7:	4.0-6.7:	1.5-4.0:	2.5-4.5:	0.5-2.5:
	!	Wet	Wet	Wet			ļ	Wet	Wet	Wet	Moist	Moist	Wet
	!	2.5-5.0:		2.5-6.7:							4.0-6.7:	4.5-6.7:	2.5-4.5:
		Moist		Moist						ļ	Wet	Wet	Moist
	 	5.0-6.7: Wet											4.5-6.7: Wet
3125A:		į											
Meehan	A	0.0-3.0:	1	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-2.0:
	!	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7: Wet	4.0-6.7: Wet	2.5-6.7: Wet	0.5-6.7: Wet	1.0-6.7: Wet	2.5-6.7: Wet	3.5-6.7: Wet	4.0-6.7: Wet	3.0-6.7: Wet	2.0-6.7: Wet	1.0-6.7: Wet	2.0-6.7: Wet
3126A:		[
Wurtsmith	A	0.0-4.0:	0.0-5.0:	0.0-3.5:	0.0-2.0:	0.0-2.5:	0.0-4.0:	0.0-0.5:	0.0-1.0:	0.0-4.0:	0.0-3.5:	0.0-3.0:	0.0-3.5:
		Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
		4.0-6.7:	5.0-6.7:	3.5-6.7:	2.0-6.7:	2.5-6.7:	4.0-6.7:	0.5-4.5:	1.0-5.0:	4.0-6.7:	3.5-6.7:	3.0-6.7:	3.5-6.7:
		Wet	Wet	Wet	Wet	Wet	Wet	Moist	Moist	Wet	Wet	Wet	Wet
	 							4.5-6.7: Wet	5.0-6.7: Wet				

Map symbol and	Hydro-	January	February	March	April	May	June	July	August	September	October	November	Decemb
soil name	group	i	i	i	i	i	i	i	i	i	i	i	İ
		İ	İ	İ	i	1	1	1	1	i	1	i	1
276A:	i	i	i	i	i	i	i	i	i	i	i	i	
Au Gres	В	0.0-3.0:	0.0-4.0:	0.0-2.5:	0.0-0.5:	0.0-1.0:	0.0-2.5:	0.0-3.5:	0.0-4.0:	0.0-3.0:	0.0-2.0:	0.0-1.0:	0.0-2.0
	ĺ	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		3.0-6.7:	4.0-6.7:	2.5-6.7:	0.5-6.7:	1.0-6.7:	2.5-6.7:	3.5-6.7:	4.0-6.7:	3.0-6.7:	2.0-6.7:	1.0-6.7:	2.0-6.7
		Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
	ļ			ļ					ļ	ļ		ļ	
312B:						-	-		ļ				
Glendenning,	-												
very stony	C	0.0-2.5:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-3.0:	0.0-6.7:	0.0-6.7:	0.0-3.5:	0.0-2.0:	0.0-1.0:	0.0-1.
		Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
		2.5-5.5:	1	1.5-5.5: Wet	0.5-5.5: Wet	1.0-5.5: Wet	3.0-5.5: Wet			3.5-5.5: Wet	2.0-5.5:	1.0-5.5: Wet	1.5-5.5 Wet
		Wet 5.5-6.7:	Wet	wet 5.5-6.7:	wet 5.5-6.7:	wet 5.5-6.7:	Wet 5.5-6.7:			wet 5.5-6.7:	Wet	wet 5.5-6.7:	Wet 5.5-6.7
		Moist	5.5-6.7: Moist	Moist	5.5-6./: Moist	5.5-6./:	5.5-6.7: Moist			Moist	5.5-6.7: Moist	Moist	Moist
	1	MOIST	MOIST	MOIST	MOIST	MOIST	MOIST	l		MOIST	Moist	MOIST	Moist
Glendenning	c	0.0-2.5:	0.0-2.5:	0.0-1.5:	0.0-0.5:	0.0-1.0:	0.0-3.0:	0.0-6.7:	0.0-6.7:	0.0-3.5:	0.0-2.0:	0.0-1.0:	0.0-1.
-	i	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	i	2.5-5.5:	2.5-5.5:	1.5-5.5:	0.5-5.5:	1.0-5.5:	3.0-5.5:	i	i	3.5-5.5:	2.0-5.5:	1.0-5.5:	1.5-5.
	i	Wet	Wet	Wet	Wet	Wet	Wet	i	i	Wet	Wet	Wet	Wet
	i	5.5-6.7:	5.5-6.7:	5.5-6.7:	5.5-6.7:	5.5-6.7:	5.5-6.7:	i	i	5.5-6.7:	5.5-6.7:	5.5-6.7:	5.5-6.7
	İ	Moist	Moist	Moist	Moist	Moist	Moist	j	İ	Moist	Moist	Moist	Moist
336A:												-	
Fenander	 B/D	0.0-1.5:	0.0-5.5:	0.0-2.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-2.0:	0.0-2.0:	0.0-4.0:	0.0-1.5:	0.0-2.5:	0.0-0.5
renancer	5/5	Moist	Moist	Wet	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
	i	1.5-2.5:		2.5-6.7:				2.0-6.7:	2.0-6.7:	4.0-6.7:	1.5-4.0:	2.5-4.5:	0.5-2.5
	i	Wet	Wet	Moist	İ	i	i	Wet	Wet	Wet	Moist	Moist	Wet
	i	2.5-5.0:			i	i	i				4.0-6.7:	4.5-6.7:	2.5-4.5
	i	Moist	i	i	i	ì	ì	i	i	i	Wet	Wet	Moist
	i	5.0-6.7:			i	i	i	i	i				4.5-6.
	i	Wet	i	i	i	i	i	i	i	i	i	i	Wet
	į	İ	j	į	j	j	j	j	İ	j	İ	j	j
403A:		Į.		1]						1	Ţ	
Loxley	A/D	0.0-1.0:	1	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.
		Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
		1.0-6.7:	1.0-6.7:	0.5-6.7:				0.5-6.7:	0.5-6.7:	0.5-6.7:			0.5-6.
		Wet	Wet	Wet				Wet	Wet	Wet		ļ	Wet
Beseman	 A/D	0.0-1.0:	0.0-1.0:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-0.5:	0.0-0.5:	0.0-0.5:	0.0-6.7:	0.0-6.7:	0.0-0.
	, -	Moist	Moist	Moist	Wet	Wet	Wet	Moist	Moist	Moist	Wet	Wet	Moist
	i	1.0-6.7:	1.0-6.7:	0.5-6.7:				0.5-6.7:	0.5-6.7:	0.5-6.7:			0.5-6.
	i	Wet	Wet	Wet	i	i	i	Wet	Wet	Wet			Wet
	1		, ,,,,,,		1	!	!			, ,,,,,,	!	1	

Table 26.--Soil Moisture Status by Depth--Continued

Table 26.--Soil Moisture Status by Depth--Continued

Map symbol and soil name	Hydro- logic group	January 	February	March	April	May	June	July	August	September	October	November	December
3403A:		 											
Dawson	A/D 	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
3424C:	İ	İ		İ	i	i	i		i	i	İ	i	İ
Frogcreek	B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-6.7: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-6.7: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-6.7: Moist
Magroc	 c 	 0.0-2.5: Moist 2.5-3.5: Wet 3.5-4.0: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-4.0: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-4.0: Moist	0.0-0.5: Moist 0.5-3.5: Wet 3.5-4.0: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-4.0: Moist	0.0-2.5: Moist 2.5-3.5: Wet 3.5-4.0: Moist	0.0-4.0: Moist 	0.0-4.0: Moist 	0.0-3.0: Moist 3.0-3.5: Wet 3.5-4.0: Moist	0.0-2.0: Moist 2.0-3.5: Wet 3.5-4.0: Moist	0.0-1.0: Moist 1.0-3.5: Wet 3.5-4.0: Moist	0.0-1.5: Moist 1.5-3.5: Wet 3.5-4.0: Moist
Stinnett	 c 		0.0-2.5: Moist 2.5-4.5: Wet 4.5-6.7: Moist	 0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist	0.0-0.5: Moist 0.5-4.5: Wet 4.5-6.7: Moist	0.0-1.0: Moist 1.0-4.5: Wet 4.5-6.7: Moist	0.0-3.0: Moist 3.0-4.5: Wet 4.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-3.5: Moist 3.5-4.5: Wet 4.5-6.7: Moist	0.0-2.0: Moist 2.0-4.5: Wet 4.5-6.7: Moist	0.0-1.0: Moist 1.0-4.5: Wet 4.5-6.7: Moist	0.0-1.5: Moist 1.5-4.5: Wet 4.5-6.7: Moist
Rock outcrop.		 											
3446A:												-	
1446A: Newson	 D 	 0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	 0.0-1.0: Moist 1.0-6.7: Wet	0.0-6.7: Wet 	0.0-6.7: Wet 	0.0-1.0: Moist 1.0-6.7: Wet	0.0-2.0: Moist 2.0-6.7: Wet	0.0-2.5: Moist 2.5-6.7: Wet	0.0-1.5: Moist 1.5-6.7: Wet	 0.0-0.5: Moist 0.5-6.7: Wet	0.0-6.7: Wet 	0.0-0.5: Moist 0.5-6.7: Wet
3448B:	į	į		İ	į	į	İ	į	į	į	į	į	į
Grettum	B 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.0: Moist 6.0-6.7: Wet	0.0-4.5: Moist 4.5-6.7: Wet	0.0-6.0: Moist 6.0-6.7: Wet	0.0-6.7: Moist 	0.0-1.0: Dry 1.0-6.7: Moist	0.0-1.5: Dry 1.5-6.7: Moist	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist 	0.0-6.7: Moist

Soi
Sur
é
호

Map symbol	Hydro-	January	February	March	April	May	June	July	August	September	October	November	Decembe
	logic		ļ	1	İ	1	ļ	ļ	İ	!	ļ		
soil name	group	l I	1	1	1			1	1	1	1		1
3448C:		 											
Grettum	В	0.0-6.7:	0.0-6.7:	0.0-6.0:	0.0-4.5:	0.0-6.0:	0.0-6.7:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
		Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
				6.0-6.7:	4.5-6.7:	6.0-6.7:		1.0-6.7:	1.5-6.7:				
				Wet	Wet	Wet		Moist	Moist				
3516A:	 	 											
Slimlake	В	0.0-4.5:	0.0-5.5:	0.0-4.0:	0.0-2.5:	0.0-3.0:	0.0-4.5:	0.0-5.0:	0.0-5.5:	0.0-4.5:	0.0-4.0:	0.0-3.5:	0.0-4.0:
	į	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist	Moist
	į	4.5-6.7:	5.5-6.7:	4.0-6.7:	2.5-6.7:	3.0-6.7:	4.5-6.7:	5.0-6.7:	5.5-6.7:	4.5-6.7:	4.0-6.7:	3.5-6.7:	4.0-6.7:
	į	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet	Wet
3629B:	 	 											
Perida	A	0.0-6.7:	0.0-6.7:	0.0-5.5:	0.0-3.5:	0.0-5.5:	0.0-5.5:	0.0-1.0:	0.0-1.5:	0.0-6.7:	0.0-6.7:	0.0-6.7:	0.0-6.7:
	į	Moist	Moist	Moist	Moist	Moist	Moist	Dry	Dry	Moist	Moist	Moist	Moist
	į	i	i	5.5-6.0:	3.5-6.0:	5.5-6.0:	5.5-6.0:	1.0-6.7:	1.5-6.7:	i	j	i	i
	į	İ	i	Wet	Wet	Wet	Wet	Moist	Moist	i	İ	i	İ
	į			6.0-6.7:	6.0-6.7:	6.0-6.7:	6.0-6.7:	j					
	į		į	Moist	Moist	Moist	Moist		į	į	į	į	į
M-W.	 	 											
Miscellaneous	İ	İ	i	i	i	i	i	i	i	i	i	i	
water	 	İ	i	i	i	i	i	i	i	i	i	i	
	İ	İ	i	i	i	i	i	i	i	i	i	i	
W.	İ		i	i	i	i	i	i	i	i	i	i	
Water	i	i	i	i	i	i	i	i	i	i	i	i	i

Table 26.--Soil Moisture Status by Depth--Continued

Table 27.--Flooding Frequency and Duration

(See text for definitions of terms used in this table. Absence of an entry indicates that data were not estimated)

Map symbol and soil name	January	 February 	March 	 April 	 May 	 June 	July 	 August 	 September 	 October 	 November 	December
3A:			1			 		[
Totagatic	Rare Brief	Rare Brief	Occasional Brief	Frequent Long	Frequent Long	Occasional Brief	Rare Brief	Rare Brief	Occasional Brief	Occasional Brief	Occasional Brief	Rare Brief
Bowstring	Rare Brief	 Rare Brief	 Occasional Long	 Frequent Long	 Frequent Long	 Occasional Long	 Rare Brief	 Rare Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Rare Brief
Ausable	Rare Brief	 Rare Brief	 Occasional Long	 Frequent Long	 Frequent Long	 Occasional Long	 Rare Brief	 Rare Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Rare Brief
22A:			 	 		 	 	 	 	 	 	
Comstock	None	None	None	None	None	None	None	None	None	None	None	None
24A: Poskin	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
27A: Scott Lake	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
28B:			 	 		 	 	 	 	 	 	
Haugen, very stony	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
Haugen	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Rosholt, very			į									
stony	None	None	None	None	None	None	None	None	None	None 	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
28C:				 		 	 	 		 	 	!
Haugen, very	N		 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt, very stony	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
Rosholt		 None	 None	None	 None	 None	None	 None	İ	ĺ	 None	None
33B:			 	 		 	 	 	 	 	 	
Chetek	None	None	None	 None	None	None	None	None	None	 None	None	None

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	August 	 September 	 October 	November 	December
33C:												
Chetek	None 	None	None	None	None	None	None	None	None	None	None	None
38A: Rosholt	None	None	None	 None	 None	 None	None	None	None	 None	 None	 None
38B: Rosholt	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
38C:	 				 		 			 		
Rosholt	None	None	None	None	 None 	None	 None 	None	None	 None 	None	None
38D: Rosholt	 None 	 None	 None	 None 	 None 	 None 	 None 	 None	 None	 None 	 None 	 None
42D: Amery	 None	None	None	 None	 None	 None	 None	None	None	 None	 None	 None
43B: Antigo	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
43C: Antigo	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
43D: Antigo	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
48A: Brill	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
63A: Crystal Lake	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
63B: Crystal Lake	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
63C: Crystal Lake	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
63E: Crystal Lake	 	 None	 None	 None	 None	<u> </u> 	 None	 None	 None	 None	 None	 None
64A:	 		 	 	 	 	 	 	 	 	 	
Totagatic	Rare Brief 	Rare Brief	Occasional Brief 	Frequent Long 	Frequent Long 	Occasional Brief 	Rare Brief 	Rare Brief 	Occasional Brief 	Occasional Brief 	Occasional Brief 	Rare Brief

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

	I		1	I	1	l	I					I
Map symbol and soil name	 January 	February	March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	December
	Ī	ĺ										
64A: Winterfield	 Rare Brief	 Rare Brief	 Occasional Brief	 Frequent Long	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Rare Brief
69B: Keweenaw	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
Sayner	 None	None	None	 None	 None	 None	 None	None	 None	 None	 None	 None
Vilas	 None	None	None	 None	 None	 None	 None	 None	 None	 None	 None	 None
69C:				 	 	 	 	 	 	 	 	
Keweenaw	None	None	None	 None	 None 	 None 	 None	None	 None 	 None 	 None 	 None
Sayner	None	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Vilas	None	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
69E:	i			 	i	! 	! 	! 		i I	i I	İ
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	 None	 None	 None	 None	 None	 None	 None	 None	 None
Vilas	 None	None	None	 None	 None	 None	 None	 None	 None	 None	 None	 None
74B:				 	 	 	 	 	 	 	 	
Vilas	None	None	None	None	 None 	 None	None	None	 None	 None	 None 	None
74C:			İ		İ	! 	 					
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
74D:	İ	j	İ	İ	į	İ	İ	İ	İ	İ	İ	į
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
100B:	İ	İ	İ		İ		 		İ	İ		
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
100C:			İ									<u> </u>
Menahga	None	None	None	 None	None	None	None	None	None	 None 	None	None
100D:	İ	İ			İ							
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
127D:	İ	i										İ
Amery	None	None	None	None	None	None	None	None	None	None	None	None
												1

Map symbol and soil name	 January 	February	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
	I	I		1		1	1				I	Ι
127D:												
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
127E:	 			1	 					 	 	1
Amery	None	None	None	None	None	None	None	None	None	None	None	None
I mici y												
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
156B:	i		i			i	i	i				i
Magnor, very	İ	İ	İ	j	İ	İ	İ	İ	İ	İ	İ	İ
stony	None	None	None	None	None	None	None	None	None	None	None	None
						1						
Magnor	None	None	None	None	None	None	None	None	None	None	None	None
157B:	 			1	l I	1				l I	l I	
Freeon, very	i	i	i	i	İ	i	i	i	i	İ	İ	i
stony	None	None	None	None	None	None	None	None	None	None	None	None
	ĺ	İ	İ	İ	Ì		İ	İ		Ì	Ì	İ
Freeon	None	None	None	None	None	None	None	None	None	None	None	None
157C:					1					1		
Freeon, very	 		1		I I		-	-	1	I I	l l	
stony	None	None	None	None	None	None	None	None	None	None	None	None
22227												
Freeon	None	None	None	None	None	None	None	None	None	None	None	None
160A:	i		i			i	i	i				i
Oesterle	None	None	None	None	None	None	None	None	None	None	None	None
182B:						1						
Padus	None	None	None	None	None	None	None	None	None	None	None	None
182C:	 			1	 					 	 	1
Padus	None	None	None	None	None	None	None	None	None	None	None	None
	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
192A:	[[
Worcester	None	None	None	None	None	None	None	None	None	None	None	None
193A:	 											1
Minocqua	None	None	None	None	None	None	None	None	None	None	None	None
215B:	ĺ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
Pence	None	None	None	None	None	None	None	None	None	None	None	None
0156												
215C: Pence	None	None	None	None	None	None	None	None	None	None	None	None
F G110 G	 MOITE		140116	 HOHE		HOHE	HOHE	HOHE	HOHE		HOHE	 HOHE
	I	1	T	T	I	I	I	I	I	I	I	I

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
215D: Pence	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
315A: Rib	 None 	 None	 None 	 None	 None 	 None 	 None 	 None 	 None	 None 	 None 	 None
337A: Plover	 None 	 None 	 None 	 None	 None 	 None 	 None 	 None 	 None	 None 	 None 	 None
368B: Mahtomedi	 None 	 None 	 None 	 None	 None 	 None 	 None 	 None 	 None	 None 	 None 	 None
Cress	 None 	None	None	None	None	 None 	 None 	None	None	 None 	None	 None
Mahtomedi	ĺ	 None 	 None 	 None 	 None 	 None 	 None 	į	 None 	 None 	 None 	 None
368D:		None 	None 		None 	None 	None 	 		None 	None 	None
Mahtomedi Cress	ĺ	None None	None None	None None	None None	None None	None None	į	None None	None None	None None	None None
371A: Croswell	 None	 None	 None	None	 None	 None	 None	 None	None	 None	 None	 None
380B: Cress	 None	 None	 None	None	 None	 None	 None	 None	None	 None	 None	 None
Rosholt	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
380C: Cress	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Rosholt380D:	None 	None	None	None	None 	None 	None 	None 	None	None 	None 	None
Cress	İ	 None 	 None 	 None 	į	 None 	 None 	į		 None 	 None 	 None
Rosholt 383B:	None 	None 	None 	None 	None 	None 	None 	None 	None 	None 	None 	None
Mahtomedi	 None 	None	None	None	 None 	 None 	 None 	 None 	None	 None 	None	 None

	1	1	1	1	1	1	1	1	1	1	1	1
Map symbol and soil name	 January 	February	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	December
SOII HAME	1	1	1	1		<u> </u>	1	1	1	1	1	1
383C:		i			i i		İ		 			
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
	İ	i	İ	İ	i	İ	i	İ	i	İ	İ	İ
383D:		İ	İ		İ	Ì	ĺ	İ	İ	Ì	Ì	İ
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
2065												
396B: Friendship		None	None	None	None	None	None	None	None	None	None	None
Filendship	None	None	None	None	None	None	None	None	None	None	None	None
Wurtsmith	None	None	None	None	None	None	None	None	None	None	None	None
		İ			İ		ĺ					
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
397A:		ļ			!		ļ		!			
Perchlake	None	None	None	None	None	None	None	None	None	None	None	None
399B:		l I	l I		I I	l I	l I		l I	l I	l I	
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
crayring												
399C:	İ	i	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
399D:		ļ					ļ		!			
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
405A:	l I	I I		l I	I I	I I	l I	I I	 	l I	l I	
Lupton	None	None	None	None	None	None	None	None	None	None	None	None
Cathro	None	None	None	None	None	None	None	None	None	None	None	None
							[
Tawas	None	None	None	None	None	None	None	None	None	None	None	None
105												
406A: Loxley	None	None	None	None	None	None	None	None	None	None	None	None
HOXIEY	None	None	None	None	None	None	None	None	None	None	None	None
407A:	i	ì	i		i		i	İ	i			
Seelyeville	None	None	None	None	None	None	None	None	None	None	None	None
		1					1		I			
Markey	None	None	None	None	None	None	None	None	None	None	None	None
44.0-		1										
410A:	 Warner		Non a	 Warra	 Warra	 Warra		Non-		 Warra	 Warra	N
Seelyeville	None	None	None	None	None	None	None	None	None	None	None	None
Cathro	1	1	1	1	1	I	1	1	1	T.	I	1
	None	None	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

Map symbol	January	 February	March	 April	May	 June	July	 August	 September	October	 November	December
and												
soil name	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>				<u> </u>	<u> </u>	<u> </u>
412A:	 			 	 	 	 	 	 	 	 	
Rifle	None	None	None	None	None	None	None	None	None	None	None	None
Tacoosh	 None	None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
415A:	 					 	 	 				
Greenwood	 None	None	None	None	 None	 None	 None	None	None	None	 None	None
	İ	İ	İ	İ	İ	İ		İ	İ	İ	İ	İ
439B: Graycalm	 Warra	None	None	None	None	 None	 None	None	None	None	None	 None
Graycaim	None	None	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
430G.	 			 	 	l I		1	 	 	 	l I
439C: Graycalm	 None	None	None	None	None	 None	 None	None	None	None	None	 None
•	İ	İ	İ		İ	İ		İ		İ	İ	İ
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
439D:	 					 		 				
Graycalm	None	None	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	None	None	 None	 None	 None	None	None	None	 None
Menanga	None	None	None	None	None	None	None	None	None	None	None	None
441C:	İ	İ	İ	İ	İ	İ		İ	İ	İ	İ	İ
Freeon	None	None	None	None	None	None	None	None	None	None	None	None
Cathro	 None	None	None	None	None	 None	 None	None	None	None	None	 None
	İ	İ	İ	İ	İ	İ		İ	İ	İ	İ	İ
442C:	 Warra	None o	Non-	None	 Warra	 Wana	 None	 Nome	 None	None	 None	None
Haugen	None 	None	None	None	None	None	None 	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None	None	None
442D.	 											
443D: Amery	 None	None	None	None	None	 None	 None	None	None	None	None	None
•												
Greenwood	None	None	None	None	None	None	None	None	None	None	None	None
461A:	 			 	 	 	 	 	 	 	 	
Bowstring	Rare	Rare	Occasional	Frequent	Frequent	Occasional	Rare	Rare	Occasional	Occasional	Occasional	Rare
	Brief	Brief	Long	Long	Long	Long	Brief	Brief	Brief	Brief	Brief	Brief
484A:	 			 	 	 	 	 	 	 	 	
Greenwood	 None	None	None	None	None	 None	None	None	None	None	None	None
	İ	İ	İ	İ	İ	İ		İ	İ	İ	İ	

Map symbol and	January	February	March	April 	May 	June 	July 	August 	September	October	November	December
soil name		1		1	<u> </u>	1			1	1	1	1
484A:			 		 		 	 				
Beseman	None	None	None	None	None	None	None	None	None	None	None	None
495B:					 		 	 				
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Perida	None	None	None	None	 None 	 None 	None	None	None	 None 	None	None
495C:		İ	İ	İ	ĺ	ĺ	İ	İ	İ	ĺ	İ	İ
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	 None 	 None 	 None 	None	None	None	 None 	None	 None
Perida	None	None	None	 None 	 None 	 None 	None	None	None	 None 	None	 None
495D:		İ	İ	İ	j	į	İ	İ	İ	į	İ	İ
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Perida	None	None	None	None	 None 	 None 	None	None	None	 None 	None	None
497A:		İ	İ	İ	ĺ	ĺ	İ	İ	İ	ĺ	İ	ĺ
Meenon	None	None	None	None	None	None	None	None	None	None	None	None
515A:			i	i	İ	i	i	i	i	i	i	
Manitowish	None	None	None	None	 None 	None	None	None	None	None	None	None
521A:		İ	İ	İ	ĺ	ĺ	İ	İ	İ	ĺ	İ	ĺ
Dody	None	None	None	None	None	None	None	None	None	None	None	None
524E:				İ			i	i			i	
Rock outcrop.		İ	İ	 	 -	i I	İ	İ	 	i I	į	İ
Frogcreek	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Metonga	None	None	None	 None 	 None 	 None 	None	None	None	 None 	None	 None
542B:		į	i	i	İ	İ	i	i	į	İ	i	į
Haugen, very		İ	İ	İ	ĺ	ĺ	İ	İ	İ	ĺ	İ	ĺ
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	None	None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

							<u> </u>			l		
Map symbol	January	February	March	April	May	June	July	August	September	October	November	December
and								ļ				
soil name	<u> </u>	<u> </u>	<u> </u>		<u> </u>			1	<u> </u>		<u> </u>	<u> </u>
542C:				 								
Haugen, very	l I	1	1	 	l I	l I	 	l I	 	l I	 	
stony	 None	None	None	 None	None	 None	None	None	 None	None	 None	None
20011												
Haugen	 None 	None	None	None	None	 None 	None	None	 None	 None 	None	None
543B:	İ	İ	İ		İ	İ	İ	į	İ	ĺ	İ	İ
Anigon	None	None	None	None	None	None	None	None	None	None	None	None
								ļ				
543C2:								1				
Anigon	None	None	None	None	None	None	None	None	None	None	None	None
544F:	 			 	 	 	 	 	 	 	 	
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
-	j	İ	İ	İ	į	İ	İ	į	İ	j	İ	İ
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
555A:	 Danie	 Dama					 Dame					 Dame
Fordum	kare Brief	Rare Brief	Occasional Brief	Frequent Long	Frequent Long	Occasional Brief	Kare Brief	Rare Brief	Occasional Brief	Occasional Brief	Occasional Brief	kare Brief
	prier	Biler	Bilei	Hong	Hong	 prier	Bilei	Bilei	 prier	 prier	 prier	 prier
574B:	İ				İ			İ				
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
		[[[ļ				
574C:								1				
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
574E:	l I	1		 	 	 	 	 	 	l I		
Sayner	 None	None	None	 None	None	 None	None	None	 None	None	 None	None
579B:	j	İ	İ	İ	į	İ	İ	İ	İ	İ	İ	İ
Parkfalls	None	None	None	None	None	None	None	None	None	None	None	None
600A: Haplosaprists	Mone	None	None	 None	None	 None	None	None	 None	 None	 None	 None
napiosaprists	None	None	None	None 	None	None 	None	None	None 	None	None	None
Psammaquents	None	None	None	None	None	None	None	None	None	None	None	None
	İ				ĺ			ĺ				
615B:	ĺ	İ	İ		ĺ	ĺ	ĺ	ĺ	ĺ	ĺ		ĺ
Cress	None	None	None	None	None	None	None	None	None	None	None	None
615C:				None o		 Wassa	 Warra			Non e	Non e	 Name
Cress	None	None	None	None	None	None	None	None	None	None	None	None
615D:	I I			1 	İ	! 	1 	İ	! 	1 	 	!
Cress	None	None	None	None	None	 None	None	None	None	None	None	None
	İ	İ	İ		İ	İ	İ	İ	İ	İ		İ

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
623A:	 		 	 	 	 	ļ !	ļ !	 	 	ļ !	
Capitola	None	None	None	None	None	None	None	None	None	None	None	None
624A:	 	ì										
Ossmer	None	None	None	None	None	None	None	None	None	None	None	None
632A:	 	l I			 							
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
632B:	 		 			 				 		
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
632C:	 				 	 				 		
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
633F:	 	l I	 	 	 	 				 		
Pence	None	None	None	None	None	None	None	None	None	None	None	None
Padus	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
648B:	 											
Sconsin	None	None	None	None	None	None	None	None	None	None	None	None
670C:	 											
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	 None 	 None	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
670E:			İ			İ				İ		
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	 None 	None	None	None	 None 	None	None	None	None	 None 	None	 None
671B:		İ	İ		İ	i				i		İ
Spoonerhill, stony	None	None	None	None	None	 None	None	None	None	None	None	None
scony	 											
Spoonerhill	None	None	None	None	None	None	None	None	None	None	None	None
680B:	 		! 									
Stanberry, stony	None	None	None	None	None	None	None	None	None	None	None	None
Pence, stony	 None 	 None	 None 	 None	 None 	 None 	 None	 None	 None	 None 	 None	 None
683A:	! 											
Tipler	None	None	None	None	None	None	None	None	None	None	None	None

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

											 I	
Map symbol and soil name	 January 	February	March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
	!	J	!		<u> </u>	!		<u> </u>	!			ļ
706A: Winterfield	 Rare Brief	Rare Brief	 Occasional Brief	 Frequent Long	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	 Occasional Brief	Occasional Brief	 Rare Brief
Totagatic	 Rare Brief	Rare Brief	 Occasional Brief	 Frequent Long	 Frequent Long	 Occasional Brief	 Rare Brief	 Rare Brief	 Occasional Brief	 Occasional Brief	Occasional Brief	 Rare Brief
724A:	 			 	 	 	 	 	 	 		
Rib	None	None	None	None	None	None	None	None	None	None	None	None
Rock outcrop.	 			 	 	 	 -	 -	 	 		
726B:	 			 		 		 		 		
Sissabagama	None	None	None	None	None	None	None	None	None	None	None	None
733A:	 			 	 	 	 	 	 	 		
Wozny	None	None	None	None	None	None	None	None	None	None	None	None
771A:	 				 	 	 	 		 		
Lenroot	None	None	None	None	None	None	None	None	None	None	None	None
827A:	 			 	 	 	 	 	 	 		
Scoba	None	None	None	None	None	None	None	None	None	None	None	None
0.50.5												
853C: Frogcreek	 None	None	None	 None	None	 None	None	 None	None	 None	 None	None
-	İ	į	İ		İ	İ	İ	İ		İ		İ
Stinnett	None	None	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	None	None	None	None	None	None	None	None	None
0.E.C.D.				 								
856B: Stinnett	 None	None	None	 None	None	 None	None	None	None	 None	None	None
	į	į	į		į	į	į		į	į		į
857B: Frogcreek	 None	None	None	 None	None	 None	None	None	 None	 None	None	None
11090100												
857C: Frogcreek	None	None	None	 None	None	 None	None	None	None	 None	 None	None
FIOGGIECK	140116	140116	HOHE	 140116	140116	140116	140116	140116	140116	 wome	140116	140116
873B:												
Stanberry	None 	None	None	None	None	None	None	None	None	None	None	None
873C:	İ	į			į	ĺ				ĺ		į
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
	l		Ī	Ī			1	1	Ī	1	l	1
873D:		[[[
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
905A: Cublake		None	None	 None		None	None	None	 None		 None	
Cublake	None	None	None	None	None	None	None	None	None	None	None	None
926A:	i I	ì		İ	İ	İ	i I	İ	İ	İ	i I	ì
Flink	None	None	None	None	None	None	None	None	None	None	None	None
	ĺ	ĺ	İ	İ	ĺ	ĺ	ĺ	ĺ	İ	ĺ	ĺ	ĺ
943D:		ļ		[[ļ
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
Greenwood	Mone	None	None	None	None	None	None	None	None	None	 None	None
Greenwood	NOME	None	None	None	None	None	None	None	None	None	NOITE	None
948A:	İ	i		i	i	i	İ	İ	i	i	İ	ì
Billyboy	None	None	None	None	None	None	None	None	None	None	None	None
												[
970C:		ļ		!				<u> </u>	!			ļ
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	None	None	None	None	None	None	None	None	None	None	 None	None
101100												
Greenwood	None	None	None	None	None	None	None	None	None	None	None	None
	ĺ	ĺ	İ	İ	ĺ	ĺ	ĺ	ĺ	İ	ĺ	ĺ	ĺ
970E:		ļ		[[ļ
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	Mone	None	None	None	None	None	 None	None	None	None	 None	None
Pence	None	None	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None	None	None	None	None	None	None	None	None	None	None
	İ	Ì	İ	İ	į	į	j	j	İ	İ	İ	Ì
1070C:		1		[[1
Fremstadt	None	None	None	None	None	None	None	None	None	None	None	None
G												
Cress	None	None	None	None	None	None	None	None	None	None	None	None
1070D:	 	l I		 	 	 	 	 	 	 	 	
Fremstadt	None	None	None	None	None	None	None	None	None	None	None	None
	İ	į	İ	İ	İ	İ	İ	İ	İ	İ	İ	į
Cress	None	None	None	None	None	None	None	None	None	None	None	None
	!	ļ	!	İ	!	!	!	!	İ	!	!	ļ
1080B:												
Spoonerhill	None	None	None	None	None	None	None	None	None	None	None	None
	I	I	I	I	I	I	I	I	I	I	I	I

Table 27.--Flooding Frequency and Duration--Continued

Table 27.--Flooding Frequency and Duration--Continued

	1			1		1	1	1	<u> </u>	1]	
Map symbol	January	February	March	April	May	June	July	August	September	October	November	December
and soil name	 	l I			l I	 	 	l I	 	l I	 	
BOII Hame	<u> </u> 	1	1	<u> </u>	<u> </u>	<u> </u> 	<u> </u>	<u> </u>	<u> </u> 	l	<u> </u>	<u> </u>
1080B:	İ	İ	İ	İ	i	İ		İ	İ	İ		İ
Spoonerhill,								[
stony	None	None	None	None	None	None	None	None	None	None	None	None
Cress	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
1653C:	 					 	 		 		 	
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
Devis Cellin												
Parkfalls	None	None	None	None	None	None	None	None	None	None	None	None
Wozny	 None 	None	None	 None 	None	 None 	 None	 None	 None 	 None 	 None 	 None
2015.	İ	İ	İ		i	İ	İ	İ	İ	İ	İ	İ
Pits	ļ	[!	ļ.	ļ.	ļ	!	ļ	ļ	ļ.		ļ
2050. Landfill	 	 	 	 	 	 	 	 	 	 	 	
		ļ	!		ļ.			ļ		ļ		ļ
3011A: Barronett		None	None	 None	None	 None	None		 None	 No. 10	 None	None
barronett	None	None	None	None	None	None	None	None	None	None	None	None
3125A:	İ	İ	İ	İ	İ	İ	İ	į	İ	į	İ	j
Meehan	None	None	None	None	None	None	None	None	None	None	None	None
3126A:	 			 		 	 	 	 	 	 	
Wurtsmith	 None	None	None	None	None	 None	 None	None	 None	None	 None	None
	j	İ	İ	İ	İ	j	İ	İ	j	į	İ	j
3276A:	!				!	!		ļ		!		<u> </u>
Au Gres	None	None	None	None	None	None	None	None	None	None	None	None
3312B:	 			 		 	 	! 	 	 	 	!
Glendenning,	İ	İ	İ	İ	İ	İ	İ	į	İ	İ	İ	j
very stony	None	None	None	None	None	None	None	None	None	None	None	None
Glendenning	None	None	None	None	None	None	None	None	None	None	 None	None
Grendenning	None	None	None	None	None	None	None	None	None	None	None 	None
3336A:	İ	İ	İ		i	İ	İ	į	İ	İ	İ	İ
Fenander	None	None	None	None	None	None	None	None	None	None	None	None
3403A:	 			 		 	 	 	 	 	 	
Loxley	 None	None	None	None	None	 None	 None	None	 None	None	 None	None
<u>-</u>												
Beseman	None	None	None	None	None	None	None	None	None	None	None	None
Dawson	None	None	None	None	None	None	None	None	None	None	 None	None
Dawson	 MOTTE	INOTIE	None	NOTIE	 MOIIG	 MOTTE	 MOIIG	None	 MOTTE	None	 MOITE	NOITE

Soi
Sul
√e)
호

	I	I		I	ı	1	1	1	1	ı	ı
January	February	March	April	May	June	July	August	September	October	November	Decembe
	1	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
None	None	None	None	None	None	None	None	None	None		
	İ	İ	İ	İ	İ	İ	i	İ	į	İ	i
None	None	None	None	None	None	None	None	None	None		
None	None	None	None	None	None	None	None	None	None		
None	None	None	None	None	None	None	None	None	None		
None	None	None	None	None	None	None	None	None	None		
	İ	İ	i	İ	İ	İ	İ	İ	i	İ	İ
None	None	None	None	None	None	None	None	None	None		
				İ					İ		
None	None	None	None	None	None	None	None	None	None		
None	None	None	None	None	None	None	None	None	None		
	İ		İ	İ	İ	İ	İ		i	İ	İ
				1	1	1	1	1		1	1
	January None None None None None	None No	None No	None No	None No	None No	None No	None None None None None None None None	None None None None None None None None		

Table 27.--Flooding Frequency and Duration--Continued

Table 28.--Ponding Frequency, Duration, and Depth

(Depth refers to the depth, in feet, of the water above the surface. See text for definitions of terms used in this table. Absence of an entry indicates that no estimate was made)

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
3A:	 		 	 	 	 	 	 		 	 	
Totagatic	None 	None 	None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None 	None 	None 	None 	None 	None 	None
Bowstring	 None 	 None 	 None 	 Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	Occasional Brief Depth: 0.5	 None
Ausable	 None 	 None 	 None 	 Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	Occasional Brief Depth:	 None
22A:										İ		
Comstock	None	None	None	None	None	None	None	None	None	None	None	None
24A:												
Poskin	None	None	None	None	None	None	None	None	None	None	None	None
27A:	 		 		 	 		 	 		 	
Scott Lake	None	None	None	None	None	None	None	None	None	None	None	None
28B:	 		[[
Haugen, very	İ	İ	i		İ	İ	İ		İ	İ	İ	
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
Rosholt, very	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
stony	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None	 None
28C:	l I		ì		! 	! 	i I	i I		İ	! 	i I
Haugen, very	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	j
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None

												1
Map symbol and	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
soil name	1	1	1	1		1	1	1	1	1	1	1
28C: Rosholt, very	 			 	 	 	 	 	 	 	 	
stony	 None 	None	None	 None 	None	None 	 None 	None	 None 	 None 	 None 	 None
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
33B:							[[
Chetek	None	None	None	None	None	None	None	None	None	None	None	None
33C:	ĺ	Ì	İ	İ	Ì	İ	ĺ	İ	ĺ	İ	ĺ	ĺ
Chetek	None	None	None	None	None	None	None	None	None	None	None	None
38A:	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	Ì
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
38B:	İ	İ	İ	į	İ	İ	į	İ	İ	İ	İ	İ
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
38C:	İ	İ	İ	İ	İ	i	İ	İ	İ	i	İ	İ
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
38D:	İ	İ	İ	İ	İ	i	İ	İ	İ	i	İ	İ
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
42D:	İ	İ	İ	i		i	i		İ	i	İ	i
Amery	None	None	None	None	None	None	None	None	None	None	None	None
43B:	i	i	i	i		i	i			i	i	i
Antigo	None	None	None	None	None	None	None	None	None	None	None	None
43C:	İ	ì		İ		i	ì			i	İ	i
Antigo	None	None	None	None	None	None	None	None	None	None	None	None
43D:	i I	Ì		İ			İ		 		i I	
Antigo	None	None	None	None	None	None	None	None	None	None	None	None
48A:				 			 					!
Brill	None	None	None	None	None	None	None	None	None	None	None	None
63A:	 			 			 		 		 	!
Crystal Lake	None	None	None	None	None	None	None	None	 None 	None	None	None
63B:							! 					I I
Crystal Lake	None	None	None	None	None	None	None	None	None	None	None	None
	1						I				1	

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol	January	 February	 March	 April	 May	 June	 July	 August	 September	October	November	December
and	January	rebluary	March	APIII	May		0419	August	Beptember	October	November	December
soil name	<u> </u>	<u> </u>	1	<u> </u>	<u> </u>	<u> </u>	<u> </u>	1	1		<u> </u>	<u> </u>
63C:	 		[
Crystal Lake	None	None	None	None	None	None	None	None	None	None	None	None
63E:	 		 	 	 	 	 			 		
Crystal Lake	None	None	None	None	None	None	None	None	None	None	None	None
64A:	 		 	 	 	 	 			 		
Totagatic	None	None	None	Frequent	Frequent	None	None	None	None	None	None	None
	 		 	Long Depth:	Long Depth:	 	 			 		
		į	İ	0.5	0.5							
Winterfield	 None	None	None	 None	 None	 None	None	None	 None	 None	None	None
69B:												
Keweenaw	 None	None	None	 None	 None	 None	None	None	 None	 None	None	None
Sayner	None	None	 None	 None	 None	 None	None	 None	None	 None	None	None
Sayner	None	None	None	None	None	None	None	None	None 	None 	None	None
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
69C:	 					 	 		 	 		
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
Vilas	 None	None	None	 None	 None	 None	None	None	 None	 None	None	None
		į	į	į	į	İ	İ	į				
69E: Keweenaw	 None	None	 None	 None	 None	 None	 None	None	 None	 None	 None	 None
_			İ	<u></u>			<u></u>					
Sayner	None 	None	None	None 	None 	None 	None	None	None 	None 	None	None
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
74B:	 			 	 	 	 			 		
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
74C:	 			 	 	 	 	 	 	 		
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
74D:	 			 	 	 	 	 	 	 		
Vilas	None	None	None	None	None	None	None	None	None	None	None	None
100B:	! 			! 	 	 	 		 	! 		!
Menahga	None	None	None	None	None	None	None	None	None	None	None	None

Map symbol and soil name	 January 	February	 March 	 April 	May	 June 	 July 	 August 	 September 	 October 	November	December
		 										
100C:		!			ļ.	!		ļ				
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
100D:	 											
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
127D:	 	 	 				 	 		 		
Amery	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
KOSHOIC	None		None	None	None	None	None	None	None	None	None	None
127E:	İ	Ì	j		İ	İ	İ	į	İ	İ	İ	İ
Amery	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	None	None	None	None	None	None	None	None	None	None	None	None
156B:	 	 	 				 	 	 	 		
Magnor, very	İ	İ	İ	İ	İ	İ	İ	İ	İ	i	İ	İ
stony	None	None	None	None	None	None	None	None	None	None	None	None
Magnor	 None	None	 None	 None	None	 None	 None	 None	 None	 None	 None	 None
157B:	 		 				 	 		 		
Freeon, very	İ	i	İ	İ	İ	İ	Ì	İ	İ	į	İ	İ
stony	None	None	None	None	None	None	None	None	None	None	None	None
Freeon	 None	None	None	None	None	None	None	None	 None	None	None	None
157C:							ļ					
Freeon, very							ļ					
stony	None	None	None	None	None	None	None	None	None	None	None	None
Freeon	None	None	None	None	None	None	None	None	None	None	None	None
160A:	 											
Oesterle	None	None	None	None	None	None	None	None	None	None	None	None
182B:	 						 	 	 	 		
Padus	None	None	None	None	None	None	None	None	None	None	None	None
182C:	 						 		 			
Padus	 None	None	None	None	None	None	None	None	 None	None	None	None
192A: Worcester	 None	None	None	None	None	None	 None	None	 None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28 Ponding Frequency, Duration, and DepthContinued	Table	28.	Ponding	Frequency,	Duration,	and	DepthContinued
--	-------	-----	---------	------------	-----------	-----	----------------

Man sambal	 	Reh	Manak	1 2	. Wass	 	 	3		Ontobas:	Name =	Domestic
Map symbol and	January 	February	March	April	May	June	July	August	September	October	November	December
soil name		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<u> </u>
L93A:												
Minocqua	None	None	None	Frequent	Frequent	None	None	None	None	None	None	None
	 	 	 	Long Depth: 0.5	Long Depth:				 	 	 	
215B:												
Pence	None	None	None	None	None	None	None	None	None	None	None	None
215C:	 											
Pence	None	None	None	None	None	None	None	None	None	None	None	None
215D:	 											
Pence	None	None	None	None	None	None	None	None	None	None	None	None
315A:	 											
Rib	None 	None 	None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None 	None 	None 	None 	None 	None 	None
337A:	 											
Plover	None	None	None	None	None	None	None	None	None	None	None	None
368B:												
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
Cress	 None 	 None 	None	None	None	 None 	None	None	None	None	None	 None
368C:			ļ				ļ	<u> </u>				
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None	None	None
368D:	 		l I									
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
Cress	 None 	 None	None	 None	 None	 None	None	 None	 None 	 None 	None	 None
71A:	İ		İ				İ	İ			İ	
Croswell	None	None	None	None	None	None	None	None	None	None	None	None
80B:												
Cress	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	 None	None	None	None	None	None	None	None	None	None	None	None
	i	i	i	i	i	i	i	i	i	i	i	i

Map symbol				7221	Marr	Tuno	July	August	Contombor	Oatobor	November	December
and	January 	February	March	April	May	June	 July	August	September	October	November	necempe:
soil name		i	i			i			İ		İ	į
]				Ī	1						ĺ
380C:												
Cress	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	 None	None	None	 None	None	None	None	None	 None	None	None	None
380D:		İ	İ	İ	Ì	İ	İ	ĺ	İ	İ	ĺ	ĺ
Cress	None	None	None	None	None	None	None	None	None	None	None	None
Rosholt	 None	None	None	 None	None	None	None	None	None	None	None	None
ROBIIOIC	Hone			None								
383B:	İ	İ	İ	j	j	İ	İ	į	İ	İ	į	İ
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
383C:				 	l I		 	 	l I		 	
Mahtomedi	None	None	None	 None	None	None	None	None	None	None	None	None
		İ	İ	j	İ	İ	İ	į	İ	İ	į	į
383D:												
Mahtomedi	None	None	None	None	None	None	None	None	None	None	None	None
396B:				 	 		 	 	 		 	
Friendship	None	None	None	None	None	None	None	None	None	None	None	None
ļ		[!	ļ	!	ļ.	!	ļ	ļ	ļ.	ļ.	!
Wurtsmith	None	None	None	None	None	None	None	None	None	None	None	None
Grayling	None	None	None	 None	None	None	 None	None	None	None	None	None
397A:		İ	İ	İ	İ	ĺ	İ	ĺ	İ	ĺ	ĺ	ĺ
Perchlake	None	None	None	None	None	None	None	None	None	None	None	None
399B:				 	I I		 	l I	 		 	
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
		İ	İ	İ	İ	İ	İ	İ	İ	İ	İ	İ
399C:												
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
399D:				 			 					İ
Grayling	None	None	None	None	None	None	None	None	None	None	None	None
		ļ	!			!			ļ		ļ	ļ
405A:	None	None	0000011	 Emagn:	Emagnet	0000011	None	None	None	None	0000011	None
Lupton	None	None	Occasional Brief	Frequent Long	Frequent Long	Occasional Brief	None	None	None	None	Occasional Brief	None
			Depth:	Depth:	Depth:	Depth:	i I	İ	i	i	Depth:	
		i	0.5	0.5	0.5	0.5	i I	İ	i	i	0.5	

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March	April	May 	June	July	August	September	October	November	Decembe
5011 1141110	<u> </u>	1	1	<u> </u>	<u> </u>	1	l	1	I	1	1	<u> </u>
05A:	j	j	į	İ	į	j	j	j	İ	į	j	į
Cathro	None 	None 	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth:	None 	None	None 	None 	Occasional Brief Depth: 0.5	None
Tawas	 None 	None 	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	Occasional Brief Depth:	 None 	None	None	None 	Occasional Brief Depth:	 None
06A:	 	İ		 	 		 					
Loxley	 None 	None	None 	Occasional Long Depth: 0.5	 None 	None 	None 	None	None	None 	None	 None
07A:		i		 				i				i
Seelyeville	 	None 	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth:	 	None	None	None 	Occasional Brief Depth:	None
Markey	 None 	None	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth:	None 	None	None	None 	Occasional Brief Depth:	 None
10A:	 	İ		 	 		 	i I				l I
Seelyeville	 None 	None	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth:	None 	None	None	None 	Occasional Brief Depth:	None
Cathro	 None 	None	Occasional Brief Depth: 0.5	 Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	Occasional Brief Depth:	 None 	None	None	 None 	Occasional Brief Depth:	 None
12A:	 	I	1	 	 		 	I I				
Rifle	 None 	None 	Occasional Brief Depth: 0.5	 Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	Occasional Brief Depth:	 None 	None	None	 None 	Occasional Brief Depth:	 None

Map symbol and soil name	January	February	March	April 	May 	June	July 	August	September	October	November	Decembe
412A:				 	 		 					[]
Tacoosh 	None	None	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	Occasional Brief Depth: 0.5	None 	None	None	None 	Occasional Brief Depth:	None
415A:				 	 		 					
Greenwood 	None	None	None 	Occasional Long Depth:	None 	None	None 	None 	None	None 	None	None
439B:				 	 		 					
Graycalm	None	None	None	None	 None	None	None	None	None	None	None	None
Menahga	None	None	None	 None	 None	None	None	None	None	None	None	None
439C:				 	 		 					
Graycalm	None	None	None	None	None	None	None	None	None	None	None	None
Menahga	None	None	None	 None	 None	None	 None	None	None	None	None	 None
439D:					 		 					l İ
Graycalm	None	None	None	 None	 None	None	None	None	None	None	None	None
Menahga	None	None	None	 None	 None	None	None	None	None	None	None	None
441C:				 	 		 					
Freeon	None	None	None	None	None	None	None	None	None	None	None	None
Cathro	None	None 	Occasional Brief Depth: 0.5	Frequent Long Depth: 0.5	 Frequent Long Depth: 0.5	Occasional Brief Depth:	 None 	None 	None	 None 	Occasional Brief Depth:	 None
442C:		İ	İ	İ		İ		į			i	İ
Haugen	None	None	None	None	None	None	None	None	None	None	None	None
Greenwood	None	None 	 None 	Occasional Long Depth: 0.5	 None 	None 	 None 	None	None	 None 	None 	 None
443D:												
Amery	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January	February	March 	April	May 	June	July 	August 	September 	October 	November 	December
443D:					 		 		 	 		[[
Greenwood	None	None	None 	Occasional Long Depth: 0.5	None 	None	None 	None 	None 	None 	None 	None
461A:									 			
Bowstring	None	None	None 	Frequent Long Depth: 0.5	Frequent Long Depth:	None	None 	None 	None 	None 	Occasional Brief Depth: 0.5	None
484A:		}			 				 	 		
Greenwood	None	None	None 	Occasional Long Depth: 0.5	None 	None 	None 	None 	None 	None 	None 	 None
Beseman	None	None	 None 	Occasional Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
495B:					 				 	 		
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	 None	None	None	 None	 None	 None	None	 None	 None	 None	 None
Perida	None	 None	 None	 None	 None 	 None	 None	None	 None 	 None	 None	 None
495C:					 							
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	None	None	None	 None	None	 None	None	 None	 None	 None	 None
Perida	None	None	None	None	 None	None	 None	None	 None	 None	None	 None
495D:		İ			 							
Karlsborg	None	None	None	None	None	None	None	None	None	None	None	None
Grettum	None	 None	None	None	 None	None	 None	None	 None	 None	 None	 None
Perida	None	 None	None	 None	 None	None	 None	None	 None	 None	 None	 None
497A:					 		 		 	 		
Meenon	None	None	None	None	None	None	None	None	None	None	None	None

Map symbol and soil name	January 	February	March 	April 	May 	June 	July	August	September	October 	November 	Decembe
515A:	 										 	
Manitowish	None	None	None	None	None	None	None	None	None	None	None	None
521A:	 					 					 	
Dody	 None 	None	None 	Frequent Long Depth: 0.5	Occasional Brief Depth:	 None 	None 	None 	None 	Occasional Brief Depth:	Occasional Brief Depth:	None
524E:												
Rock outcrop.	 											
Frogcreek	 None	None	None	None	None	None	None	None	None	None	None	None
Metonga	 None	None	None	None	None	None	None	None	None	None	None	None
542B:	 					 					 	
Haugen, very	İ	İ	İ		İ	i	i	i	İ	İ	İ	İ
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	 None	None	None	None	None	 None	None	None	None	None	None	None
542C:	 					 						
Haugen, very]		1	
stony	None	None	None	None	None	None	None	None	None	None	None	None
Haugen	 None	None	None	None	None	None	None	None	None	None	None	None
543B:							1	1			i	
Anigon	None	None	None	None	None	None	None	None	None	None	None	None
543C2:												
Anigon	None	None	None	None	None	None	None	None	None	None	None	None
544F:	 					 						
Menahga	None	None	None	None	None	None	None	None	None	None	None	None
Mahtomedi	 None	None	None	None	None	 None	None	None	None	None	None	None
555A:	 					 					 	
Fordum	None 	None	None	Frequent Long Depth:	Frequent Long Depth:	None	None	None	None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	 January 	 February 	 March 	 April 	 May 	 June 	 July 	 August 	 September 	 October 	 November 	 December
	1	1	1	1	<u> </u>	1	I	1	1	<u> </u>	1	
574B:	İ	į	į	ĺ	İ	İ	İ	Ì	ĺ	İ	İ	İ
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
574C:												
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
574E:												
Sayner	None	None	None	None	None	None	None	None	None	None	None	None
								ļ				
579B:												
Parkfalls	None	None	None	None	None	None	None	None	None	None	None	None
600A:												
Haplosaprists		. –	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent		Frequent	Frequent	Frequent
	Very long									Very long		
	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Psammaquents		Frequent	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent	Frequent
	Very long			Very long						Very long		
	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:	Depth:
	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
615B:								1				
Cress	None	None	None	None	None	None	None	None	None	None	None	None
6156												
615C:				 	 		 		 	 		
Cress	None	None	None	None	None	None	None	None	None	None	None	None
615D:	1	1	1	l I	 	1	l I	1	l I		1	l I
Cress		 Warra	l Warra							 None		
Cress	None	None	None	None	None	None	None	None	None	None	None	None
623A:	 	l I	I I	l I	l I	 	l I	l I	l I	l I	 	l I
		 Warra	l Warra	 	 							
Capitola	None	None	None	Frequent	Frequent	None	None	None	None	None	None	None
				Long	Long							
				Depth:	Depth:							
				0.5	0.5							
60.45												
624A:								1				
Ossmer	None	None	None	None	None	None	None	None	None	None	None	None
				[Į.				
632A:								1				
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
	1					1					1	

Map symbol and soil name	 January 	February	 March 	 April 	 May 	June	July	 August 	 September 	 October 	 November 	 December
					1		1				I	
632B:												
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
632C:								1				
Aftad	None	None	None	None	None	None	None	None	None	None	None	None
633F:	 						}			I I		
Pence	 None	None	None	None	None	None	None	None	None	None	None	None
101100												
Padus	None	None	None	None	None	None	None	None	None	None	None	None
	İ	j	İ	j	İ	j	Ì	İ	İ	j	İ	İ
648B:												
Sconsin	None	None	None	None	None	None	None	None	None	None	None	None
670C:		Non-	NT		Non-	Non-		None o	Non-	Non-		
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	 None	None	None	None	None	None	None	None	None	None	None	None
101100												
670E:	! 	İ	İ	İ	i	i	i	i	İ	İ	i	i
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
	ĺ	j	İ	İ	İ	j	İ	İ		Ì	İ	İ
Pence	None	None	None	None	None	None	None	None	None	None	None	None
			!	İ			ļ	!			!	
671B:								1				
Spoonerhill,		l Warra	 NT	None	None			None	None	None	 Warra	None
stony	None	None	None	None	None	None	None	None	None	None	None	None
Spoonerhill	 None	None	None	None	None	None	None	None	None	None	None	None
5,000												
680B:	İ	İ	İ	İ	İ	i	i	İ	İ	İ	į	İ
Stanberry, stony	None	None	None	None	None	None	None	None	None	None	None	None
Pence, stony	None	None	None	None	None	None	None	None	None	None	None	None
683A:			137			127		127				
Tipler	None	None	None	None	None	None	None	None	None	None	None	None
706A:	 								1			
Winterfield	None	None	None	None	None	None	None	None	None	None	None	None
							İ					
Totagatic	None	None	None	Frequent	Frequent	None	None	None	None	None	None	None
				Long	Long							
				Depth:	Depth:							
				0.5	0.5		Ţ				1	[
		I		1	1	1	I	1		I	I	I

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Map symbol and soil name	January 	February 	March 	April 	May 	June 	July 	August 	September	October 	November	Decembe:
		1]]]			ļ	ļ
724A: Rib	 None 	 None 	 None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None	 None 	 None 	None 	 None
Rock outcrop.	 											
726B:	 											
Sissabagama	 None 	None	None	None	None	None	None	None	None	None	None	None
733A:												
Wozny	None 	None 	None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None	None	None 	None 	None 	Occasional Brief Depth: 0.5	None
771A:	 											l İ
Lenroot	None	None	None	None	None	None	None	None	None	None	None	None
327A:	 											
Scoba	None	None	None	None	None	None	None	None	None	None	None	None
353C:		i		i				i				i
Frogcreek	None	None	None	None	None	None	None	None	None	None	None	None
Stinnett	 None	None	None	None	None	None	None	None	None	None	None	 None
Wozny	 None 	None 	 None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	 None 	None 	None 	 None 	 None 	Occasional Brief Depth:	 None
356B:	 											
Stinnett	None	None	None	None	None	None	None	None	None	None	None	None
357B:	 											
Frogcreek	None	None	None	None	None	None	None	None	None	None	None	None
357C:	 											
Frogcreek	None	None	None	None	None	None	None	None	None	None	None	None
373B:	 											
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None

				ļ		! _						
Map symbol and soil name	January 	February 	March 	April 	May 	June 	July 	August 	September	October 	November	December
SOII Hame	<u> </u> 	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
873C:	İ	İ	İ	<u></u>	İ	İ	İ	İ	İ	İ	İ	İ
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
873D:							į					
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
905A:	İ	İ	İ	İ	İ	j	İ	İ	İ	j	İ	İ
Cublake	None	None	None	None	None	None	None	None	None	None	None	None
926A:	 											
Flink	None	None	None	None	None	None	None	None	None	None	None	None
943D:	! 											
Stanberry	None	None	None	None	None	None	None	None	None	None	None	None
Greenwood	 None 	 None 	 None 	Occasional Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
948A:	 											
Billyboy	None	None	None	None	None	None	None	None	None	None	None	None
970C:	 											
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	 None	None	None	None	 None	None	None	None	None	None	None	None
Greenwood	 None 	 None 	 None 	Occasional Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
970E:		İ	İ	İ	İ	i	İ	İ	İ	i	İ	
Keweenaw	None	None	None	None	None	None	None	None	None	None	None	None
Pence	 None	None	None	None	 None	None	None	None	None	None	None	None
Greenwood	 None 	 None 	 None 	Occasional Long Depth: 0.5	 None 	 None 	 None 	 None 	 None 	 None 	 None 	 None
1070C:	 		 	 	 			 	 		 	1
Fremstadt	None	None	None	None	None	None	None	None	None	None	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.	Ponding	Frequency,	Duration,	and	DepthContinued
-----------	---------	------------	-----------	-----	----------------

Map symbol and	 January 	 February	 March	 April 	 May 	 June 	 July 	 August 	 September	 October	 November	 December
soil name				<u> </u>		<u> </u>	<u> </u>			<u> </u>	<u> </u>	
	I	[ļ	[[ļ	[ļ.	ļ.	
1070C:			1									1
Cress	None	None	None	None	None	None	None	None	None	None	None	None
1070D:	 	1	 	 	 	 	 		 	 	 	
Fremstadt	None	None	None	None	None	None	None	None	None	None	None	None
	į	İ	į	İ	į	İ	į	İ	j	İ	İ	į
Cress	None	None	None	None	None	None	None	None	None	None	None	None
1080B: Spoonerhill		Non-				 Ware a						
spoonermili	None	None	None	None	None	None	None	None	None	None	None	None
Spoonerhill,	İ		ì	! 	İ	! 	İ			i I	i I	ì
stony	None	None	None	None	None	None	None	None	None	None	None	None
Cress	None	None	None	None	None	None	None	None	None	None	None	None
1653C:			1	 		 	 					
Stanberry	 None	None	None	 None	None	 None	None	None	 None	 None	 None	 None
beamberry												
Parkfalls	None	None	None	None	None	None	None	None	None	None	None	None
Wozny	None	None	None	Frequent	-	None	None	None	None	None	Occasional	None
	1		l I	Long Depth:	Long	 	l I			 	Brief Depth:	
	 	1	 	Depth: 0.5	Depth:	 	 		 	l I	Depth:	
	i	İ	i				İ			İ		i
2015.	į	İ	į	İ	į	İ	j	İ	İ	j	j	į
Pits												
2050. Landfill	 	1	l I	 	l I	l I	l I	1	l I	 	 	l I
Handiii	 	1	 	 	 	 	 		 	 	 	
3011A:	İ	İ	İ	İ	İ	İ	İ	i	İ	İ	İ	İ
Barronett	None	None	None	Frequent	Frequent	None	None	None	None	None	None	None
	[!	ļ	Long	Long		ļ.	[ļ
			ļ	Depth:	Depth:							
				0.5	0.5							
3125A:	 		[[
Meehan	None	None	None	 None	None	 None	None	None	None	None	None	None
	İ	İ	İ	İ	į	İ	į	i	į	İ	İ	İ
3126A:			1									
Wurtsmith	None	None	None	None	None	None	None	None	None	None	None	None

Map symbol and	 January 	February	March	April	May	June	July	August	September	October	November	December
soil name		İ		İ		i	İ		İ	İ	İ	İ
20562												
3276A: Au Gres	 None	None	None	None	 None	None	None	None	None	None	None	None
3312B:												
Glendenning, very stony	None	None	None	None	 None	None	None	None	None	None	None	None
very scony	None	None	None	None	None	None	None	None	None	None	None	None
Glendenning	 None 	None	None	None	 None 	None	None	None	None	None	None	None
3336A:	İ	i	İ	į	İ	i	i	j	i	İ	i	İ
Fenander	None 	None 	None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None 	None 	None 	None 	None 	None 	None
	İ	i	İ	į	İ	i	i	j	i	İ	i	İ
3403A:												
Loxley	None 	None	None 	Occasional Long Depth: 0.5	None 	None 	None 	None	None 	None 	None 	None
Beseman	 None	None	None	Occasional	 None	None	None	None	None	None	None	None
				Long Depth: 0.5								
Dawson	 None 	None	 None 	Occasional Long Depth: 0.5	 None 	None 	None 	None	None	 None 	None	None
3424C:						i	1	i	i			
Frogcreek	 None 	None	None	None	 None 	None	None	None	None	None	None	None
Magroc	 None 	None	None	None	 None 	None	None	None	None	None	None	None
Stinnett	 None 	None	None	None	 None 	None	None	None	None	None	None	None
Rock outcrop.	 	į	İ	 	 -			į		į	į	İ
3446A:	İ	İ	į	į	İ	i	i	İ	j	İ	i	i
Newson	None 	None 	None 	Frequent Long Depth: 0.5	Frequent Long Depth: 0.5	None 	None 	None 	None 	None 	None	None

Table 28.--Ponding Frequency, Duration, and Depth--Continued

Table 28.--Ponding Frequency, Duration, and Depth--Continued

	Ī	1	I	I	I	Ī	I	I	I	I	I	
Map symbol	January	February	March	April	May	June	July	August	September	October	November	December
and												
soil name	į	İ	i	İ	İ	į	İ	İ	İ	İ	į	İ
	Ī	İ	İ	Ī	l	Ī		Ī	Ī	l	Ī	İ
3448B:	İ	İ	į	İ	İ	İ	İ	Ì	İ	İ	į	į
Grettum	None	None	None	None	None	None	None	None	None	None	None	None
3448C:												
Grettum	None	None	None	None	None	None	None	None	None	None	None	None
0.54.65												
3516A:												
Slimlake	None	None	None	None	None	None	None	None	None	None	None	None
3629B:	 			1	 	 	 		1	 		
Perida	None	None	None	None	None	None	None	None	None	None	None	None
101144												
M-W.	i	İ	İ	i	i	i	İ	i	i	i	i	İ
Miscellaneous	i	İ	İ	i	İ	i	İ	i	i	İ	į	İ
water	İ	İ	į	İ	İ	İ	İ	Ì	İ	İ	į	İ
	ĺ	İ	İ	İ	ĺ	ĺ	İ	İ	İ	ĺ	İ	İ
W.								[
Water												

Table 29.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated)

Map symbol	Restrictive	layer	Subsid	lence	 Potential	Risk of corrosion	
and soil name		Depth	<u> </u>		for	Uncoated	
	Kind	to top	Initial	Total	frost action	steel	Concrete
		In	In	In			
3A:	 				1	 	
Totagatic		>80	4-12	25-30	Moderate	 High	Moderate
			į į		İ		
Bowstring		>80	6-18	50-55	High	Moderate	Low
Ausable		>80	4-12	25-30	Moderate	 Moderate	Low
22A:							
Comstock	 	>80			 High	 High	Moderate
	İ	j	i i		j	j	i
24A:							
Poskin	 	>80			High	High 	Moderate
27A:			i i				
Scott Lake	ļ	>80			Moderate	Moderate	Moderate
28B:	 					1	
Haugen, very stony	 Dense material	60-80			Moderate	Moderate	Moderate
	İ	į	į į		į	ĺ	į
Haugen	Dense material	60-80			Moderate	Moderate	Moderate
Rosholt, very stony	 	>80			Moderate	Low	Moderate
	į	j	i i		j	j	j
Rosholt		>80			Moderate	Low	Moderate
28C:	 					 	
Haugen, very stony	Dense material	60-80	i i		Moderate	Moderate	Moderate
	!				ļ.	!	!
Haugen	Dense material	60-80			Moderate	Moderate	Moderate
Rosholt, very stony		>80			Moderate	Low	Moderate
	İ	j	į į		İ	ĺ	İ
Rosholt		>80			Moderate	Low	Moderate
33B:	 					 	
Chetek		>80	i i		Low	Low	Moderate
33C: Chetek	 	>80			Low	Low	Moderate
checen							
38A:						!	
Rosholt	 	>80			Moderate	Low	Moderate
38B:	 						
Rosholt		>80	j j		Moderate	Low	Moderate
200							
88C: Rosholt	 	>80			Moderate	Low	Moderate
	İ		i i		İ	į	İ
38D:							120.00
Rosholt	 	>80			Moderate	Low	Moderate
12D:						 	
Amery	Dense material	60-80	j j		Moderate	Low	Moderate
120.	 						
l3B: Antigo	 	>80			 Moderate	Low	Moderate
3 ·	i	1	; ;		1	i i	

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	lence	 Potential	Risk of	corrosion
and soil name	Kind	Depth to top	 Initial	Total	for frost action	Uncoated steel	Concrete
		In	In	In			
43C: Antigo		 >80	 		 Moderate 	 Low 	 Moderate
43D: Antigo		 >80	 	 	 Moderate 	 Low 	 Moderate
48A: Brill		 >80	 		 High 	 Moderate 	 Moderate
63A: Crystal Lake		 >80	 		 High 	 Moderate 	 Moderate
63B: Crystal Lake		>80	 		 High 	 Moderate 	 Moderate
63C: Crystal Lake		>80	 		 High 	 Moderate 	 Moderate
63E: Crystal Lake		>80	 		 High	 Moderate	 Moderate
64A: Totagatic		>80	 4-12	25-30	 Moderate	 High	 Moderate
Winterfield		>80			Low	Low	Low
69B: 		>80	 		Low	 Low	 Moderate
Sayner		 >80			Low	Low	 High
 		 >80 	 		 Low 	 Low 	 Moderate
69C: Keweenaw		 >80	 		Low	 Low 	 Moderate
Sayner		>80			Low	Low	High
 		 >80 	 		 Low 	 Low 	 Moderate
69E: Keweenaw		 >80 	 		 Low 	 Low 	 Moderate
Sayner		>80			Low	Low	High
Vilas		 >80 	 		Low	 Low 	 Moderate
74B: Vilas		 >80 	 		 Low 	 Low 	 Moderate
74C: Vilas		>80	 		 Low 	 Low 	 Moderate
74D: Vilas		>80	 		Low	 Low	 Moderate
100B:		>80	 		 Low 	 Low	 High
100C: Menahga		 >80	 		 Low 	 Low 	 High

Table 29.--Soil Features--Continued

			1 - 1 1		1		
Map symbol	Restrictive 1		Subsid	lence	Potential		corrosion
and soil name		Depth			for	Uncoated	
	Kind	to top	Initial	Total	frost action	steel	Concrete
		In	In	In			
	İ	i	į i		İ	İ	İ
100D:	i	i	i i		i	İ	i
Menahga		>80	i i		Low	Low	High
Menanga		>00			LIOW	LIOM	Inidii
		!	!				!
127D:							
Amery	Dense material	60-80			Moderate	Low	Moderate
Rosholt		>80			Moderate	Low	Moderate
	i	i	i i		i	İ	i
127E:	1	i	i		i i	I I	i
	 Damas makanda]				Moderate	Low	Moderate
Amery	Dense material	60-80	!		Moderate	LOW	Moderate
Rosholt		>80			Moderate	Low	Moderate
156B:	İ	İ	į į		İ	ĺ	İ
Magnor, very stony	Dense material	40-60	i i		Moderate	Moderate	Moderate
nagnor, very beeny		1					
Ma	 Damas makanda]	1 40 60			Moderate	135-3	 Madamaka
Magnor	Dense material	40-60	!		Moderate	Moderate	Moderate
157B:							
Freeon, very stony	Dense material	40-60			Moderate	Moderate	Moderate
	İ	i	į i		İ	İ	İ
Freeon	Dense material	40-60			Moderate	Moderate	Moderate
1100011		1 10 00			I	I	I
1550		!			1	l I	1
157C:			!			 	
Freeon, very stony	Dense material	40-60			Moderate	Moderate	Moderate
Freeon	Dense material	40-60			Moderate	Moderate	Moderate
		1					
160A:	İ	i	į i		İ	İ	İ
Oesterle		>80	i i		Moderate	Moderate	Moderate
00000110		1 200			I	I	I
100-		!					
182B:			!				
Padus		>80			Moderate	Low	Moderate
182C:							
Padus		>80			Moderate	Low	Moderate
	i	i	į i		i	İ	i
192A:	i	i	i i		i	İ	i
		>80			Moderate	Moderate	Moderate
Worcester		>80	!		Moderate	Moderate	Moderate
193A:							
Minocqua		>80			High	High	Moderate
215B:						1	1
Pence	i	>80	i i		Low	Low	Moderate
1 01100		1 200			1	1	I
2150		I I			I I	I I	I I
215C:	!	!					!
Pence		>80			Low	Low	Moderate
215D:		1					
Pence		>80	i i		Low	Low	Moderate
	i		i i			İ	İ
2153.		1			1	I I	
315A:		1			 mail = 1:	lerites	lare a
Rib		>80			High	High	Moderate
	[[ļ.	<u> </u>	[
337A:							
Plover		>80			Moderate	Moderate	Moderate
	İ	i	į į		İ	İ	İ
368B:		i			i	İ	i
Mahtomedi		- 00			I T CTV	I T CTUT	Modern + -
mantomed1		>80			Low	Low	Moderate
	!	!	<u> </u>		ļ.	!	ļ.
Cress		>80			Low	Low	Moderate

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	dence	 Potential	Risk of	corrosion
and soil name	Kind	Depth to top	 Initial		for frost action	Uncoated steel	Concrete
		In 	In 	In 		 	
368C: Mahtomedi		>80		 	Low	Low	 Moderate
Cress		>80			Low	Low	Moderate
368D:		>80			Low	Low	 Moderate
Cress		>80			Low	Low	Moderate
371A:		>80	 		 - Low	Low	 Moderate
380B: Cress		 >80		 	 Low	 Low	 Moderate
Rosholt		>80			 Moderate	Low	Moderate
380C: Cress		 >80	 	 	 Low	 Low	 Moderate
Rosholt		>80			Moderate	Low	Moderate
380D:						 	
Cress		>80 		 	Low	Low	Moderate
Rosholt		>80 		 	Moderate	Low	Moderate
383B: Mahtomedi		 >80 	 	 	 Low 	 Low 	 Moderate
383C:		>80		 	 Low	Low	 Moderate
383D:		>80		 	Low	Low	 Moderate
396B:		>80			Low	Low	 Moderate
Wurtsmith		>80			Low	Low	High
Grayling		>80		 	Low	 Low 	Moderate
397A:		>80			Low	Low	 Moderate
399B: Grayling		>80			 Low	Low	 Moderate
 399C: Grayling		 >80	 	 	 Low	 Low	 Moderate
399D: Grayling		 >80	 	 	 Low	 Low	 Moderate
405A: Lupton		 >80	 6-18	 50-55	 High	 Moderate	 Low
Cathro		>80	4-12	 19-22	 High	 Moderate	Moderate
 Tawas		>80	4-15	 25-30	 High	 Moderate	Low
į		į	į	İ		į	į

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	 Potential	Risk of	corrosion
and soil name		Depth		_	for	Uncoated	[
	Kind	to top	Initial In	Total In	frost action	steel	Concrete
			111			İ	
406A: Loxley	 	 >80	 6-18	50-55	 High 	 Moderate	 High
407A: Seelyeville	 	 >80	0-8	20-22	 High	 Moderate	 Moderate
Markey		>80	0-4	10-12	 High	 Moderate	Low
410A:	l I				l I	 	
Seelyeville	 	 >80 	0-8	20-22	 High 	 Moderate 	 Moderate
Cathro		 >80 	4-12	19-22	 High 	 Moderate 	Moderate
412A: Rifle		>80	 		 High	 Moderate	Low
Tacoosh		>80	4-12	19-22	 High	 Moderate	Low
415A: Greenwood	 	 >80	 6-18	50-55	 High	 Moderate	 High
400-							
439B: Graycalm	 	 >80 	 		 Low 	 Low 	 High
Menahga	 	 >80 	 		Low	Low	 High
439C: Graycalm		>80	 		Low	Low	 High
Menahga	 	 >80	 		 Low	 Low	 High
439D: Graycalm	 	 >80	 		 Low	 Low	 High
Menahga		 >80			Low	Low	 High
441C: Freeon	 Dense material	 40-60	 		 Moderate	 Moderate	 Moderate
Cathro		 >80	4-12	19-22	 High	 Moderate	 Moderate
442C:	l I				l I	 	
Haugen	 Dense material 	60-80	 		 Moderate 	 Moderate 	 Moderate
Greenwood	 	>80 	 		 High 	Moderate	 High
443D: Amery	 Dense material	60-80			 Moderate	Low	 Moderate
Greenwood	 	 >80	 		 High 	 Moderate	 High
461A: Bowstring	 	 >80	 6-18 	50-55	 High 	 Moderate 	 Low
484A: Greenwood		>80	 		 High	 Moderate	 High
Beseman	 	 >80 	 4-18 	12-36	 High 	 High 	 High
495B: Karlsborg	 	 >80 	 		 Moderate 	 High 	 Moderate

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	dence	 Potential	Risk of	corrosion
and soil name	Kind		 Initial		for frost action	Uncoated steel	Concrete
	 	In	In	In	l I		
495B: Grettum		>80			Low	Low	Moderate
Perida	 	 >80 	 		 Moderate 	 High 	 Moderate
495C: Karlsborg		>80	 		 Moderate	 High	Moderate
Grettum	 	>80			Low	 Low	 Moderate
Perida	 	>80	 		 Moderate 	 High 	 Moderate
495D:					İ		
Karlsborg	 	>80 	 		Moderate	High 	Moderate
Grettum		>80			Low	Low	Moderate
Perida	 	 >80	 		 Moderate 	 High 	 Moderate
497A:							
Meenon	 	>80 	 		Moderate	High 	Moderate
515A: Manitowish	 	>80			 Low 	 Low 	 Moderate
521A: Dody		>80			 High	 High	Moderate
524E: Rock outcrop.	 	 	 		 	 	
Frogcreek	 Dense material	40-60	 		 Moderate	 Moderate	Moderate
Metonga	 Bedrock (lithic)	20-40			 Moderate	Low	 High
542B:			 		l I	 	
Haugen, very stony	 Dense material	60-80	i i		Moderate	 Moderate 	Moderate
Haugen	Dense material	60-80	i i I		Moderate	 Moderate 	Moderate
542C: Haugen, very stony	 Dense material	60-80			 Moderate	 Moderate	Moderate
Haugen	 Dense material	60-80			 Moderate	 Moderate 	 Moderate
543B: Anigon	 	 >80	 		 Moderate 	 Moderate 	 Moderate
543C2: Anigon	 	>80			 Moderate	 Moderate	 Moderate
544F: Menahga	 	 >80	 		Low	 Low	 High
Mahtomedi		>80			Low	Low	 Moderate
555A: Fordum	 	 >80	 		 High	 High	Low
574B: Sayner	 	 >80 	 		 Low 	 Low 	 High

Table 29.--Soil Features--Continued

Map symbol	Restrictive	Layer	Subsid	lence	 Potential	Risk of	corrosion
and soil name	Kind	Depth	 Initial	Total	for frost action	Uncoated steel	Concrete
	KING	to top	In	In	ITOSC ACCION	steel	Concrete
		į	į į			į	į
574C: Sayner		>80			Low	Low	 High
24/1102			i i				
574E: Sayner		>80			Low	Low	 u:ab
Sayner		>80				 	High
579B:							
Parkfalls	Dense material	30-50			High 	Moderate	Moderate
600A:		į	į į			į	į
Haplosaprists.		l I				 	
Psammaquents.		i	į į			İ	İ
615B:						 	
Cress		>80			Low	Low	Moderate
615C:							
Cress		>80			Low	Low	Moderate
		İ				ļ	ļ
615D: Cress		>80			Low	Low	Moderate
			į į				
623A: Capitola	 Dense material	20-40			 High	 High	Moderate
capitola		20 10					
624A: Ossmer		>80			Moderate	Moderate	Moderate
OSSMer		>80			Moderate	Moderate	Moderate
632A:						 	
Aftad		>80 			Moderate	Moderate	Moderate
632B:			į į				
Aftad		>80 			Moderate	Moderate	Moderate
632C:		į	į į			į	į
Aftad		>80			Moderate	Moderate	Moderate
633F:		İ					
Pence		>80			Low	Low	Moderate
Padus		>80			Moderate	Low	Moderate
648B:							
Sconsin	Dense material	20-38			Moderate	 Moderate	Moderate
670C:							
Keweenaw		>80			Low	Low	Moderate
_			į į				
Pence		>80 			Low	Low	Moderate
670E:			į į		<u> </u>		j Inc. a
Keweenaw		>80 			Low	Low	Moderate
Pence		>80			Low	Low	Moderate
671B:						 	
Spoonerhill, stony		>80			Low	Low	Moderate
Spoonerhill							
		>80			Low	Low	Moderate

Table 29.--Soil Features--Continued

Map symbol	Restrictive	layer	Subsid	lence	 Potential	Risk of	corrosion
and soil name	Kind	Depth to top	 Initial	Total	for frost action	Uncoated steel	Concrete
		In	In	In			1
680B: Stanberry, stony	 Dense material	40-60	 	 	 Moderate	 Moderate	 Moderate
Pence, stony	 	>80			Low	Low	 Moderate
683A: Tipler	 	>80			 Moderate	 Moderate	 Moderate
706A: Winterfield	 	>80			Low	Low	Low
Totagatic		>80			Moderate	 High	 Moderate
724A: Rib	 	 >80	 	 	 High 	 High 	 Moderate
Rock outcrop.							
726B: Sissabagama	 	 >80	 	 	 	 Low 	 Moderate
733A: Wozny	 Dense material	40-60	i i		 High	 High	 Moderate
771A: Lenroot	 	>80	 		 - Low	 Low 	 Moderate
827A: Scoba	 	>80	 	 	 Moderate 	 Moderate 	 Moderate
853C: Frogcreek	 Dense material	40-60			 Moderate	 Moderate	Moderate
Stinnett	 Dense material	40-60		 	 Moderate	 Moderate 	 Moderate
Wozny	Dense material	40-60			 High 	 High 	 Moderate
856B: Stinnett	 Dense material	40-60	 		 Moderate 	 Moderate	Moderate
857B: Frogcreek	 Dense material	 40-60 	 	 	 Moderate 	 Moderate	Moderate
857C: Frogcreek	 Dense material	40-60	 	 	 Moderate	 Moderate 	Moderate
873B: Stanberry	 Dense material	40-60	i 		 Moderate	 Moderate	Moderate
873C: Stanberry	 Dense material	40-60	 	 	 Moderate 	 Moderate 	 Moderate
873D: Stanberry	 Dense material	 40-60	 		 Moderate 	 Moderate 	 Moderate
905A: Cublake	 	>80	 		 - Low	 Low	 High
926A: Flink	 	 >80	 	 	 Moderate 	 Low 	 High

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	 Potential	Risk of	corrosion
and soil name	Kind	Depth to top	 Initial	Total	for frost action	Uncoated steel	Concrete
		In	In	In			
943D: Stanberry	 Dense material	 40-60	 		 Moderate	 Moderate	 Moderate
Greenwood	 	>80			 High	 Moderate	 High
948A: Billyboy	 	 >80	 		 Moderate 	 Moderate 	 Moderate
970C: Keweenaw	 	 >80	 		 - Low	 Low	 Moderate
Pence		>80	 		Low	Low	Moderate
Greenwood	 	>80			 High 	 Moderate 	 High
970E: Keweenaw	 	 >80	 		 Low 	 Low	 Moderate
Pence		>80	 		Low	Low	Moderate
Greenwood		>80 			 High 	 Moderate 	High
1070C: Fremstadt	 	>80	 		Low	 Low	 Moderate
Cress		>80			Low	 Low 	Moderate
1070D: Fremstadt	 	 >80	 		Low	 Low	 Moderate
Cress		>80 			Low	Low	Moderate
1080B: Spoonerhill	 	 >80	 		 Low 	 Low 	 Moderate
Spoonerhill, stony		>80	 		Low	Low	Moderate
Cress		>80 			Low	Low	Moderate
1653C: Stanberry	 Dense material	40-60	 		 Moderate	 Moderate	 Moderate
Parkfalls	 Dense material 	30-50			 High 	 Moderate	Moderate
Wozny	 Dense material 	40-60			 High 	 High 	Moderate
2015. Pits	 				 	 	
2050. Landfill	 	 			 	 	
3011A: Barronett	 	 >80	 		 High	 High	 Moderate
3125A: Meehan	 	 >80	 		Low	 Low	 High
3126A: Wurtsmith	 	 >80	 		 Low	 Low	 High

Table 29.--Soil Features--Continued

Map symbol	Restrictive 1	ayer	Subsid	lence	 Potential	Risk of	corrosion
and soil name	Kind	Depth to top	 Initial	Total	for frost action	Uncoated steel	Concrete
	KIIIG	In	In	In		Sceen	Concrete
			i i			 	
3276A:	İ	İ	į į		İ	İ	İ
Au Gres		>80			Low	Low	High
3312B:	 				1	 	
Glendenning, very stony	Dense material	60-80	i i		Moderate	Moderate	Moderate
	 -						
Glendenning	Dense material	60-80			Moderate	Moderate	Moderate
3336A:		İ				 	
Fenander	i	>80	j j		High	High	Low
14023							
3403A: Loxley	 	>80	6-18	50-55	 High	 Moderate	 High
Beseman		>80	4-18	12-36	High	Moderate	High
Dawson	 	>80	4-18	30-36	 High	 Moderate	 High
Dawbon		200	4-10	30-30		 	
424C:	İ	İ	į į		İ	İ	İ
Frogcreek	Dense material	40-60			Moderate	Moderate	Moderate
Magroc	Bedrock (lithic)	40-60			Moderate	 Moderate	Moderate
			i i				
Stinnett	Dense material	40-60			Moderate	Moderate	Moderate
Rock outcrop.	 	l I			I I	 	
noon outdrop.		İ	i i				i
3446A:	!	ļ			!	!	!
Newson		>80			Moderate	High	High
3448B:	 	l I				 	
Grettum		>80	i i		Low	Low	Moderate
448C: Grettum	 	>80			Low	Low	Moderate
01000			i i				
516A:	!	ļ			!	!	!
Slimlake		>80			Low	Low	Moderate
629B:	 					 	
Perida		>80	i i		Moderate	High	Moderate
. 14							
Miscellaneous water	 					 	
			i i				
			ļ į				
Water	I	1	1		1	I .	1

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487–00.

Jenny, Hans. 1941. Factors of soil formation.

Johnson, Mark D. 2000. Pleistocene geology of Polk County, Wisconsin. Wisconsin Geological and Natural History Survey Bulletin 92.

Kotar, John, Joseph A. Kovach, and Gary Brand. 1999. Wisconsin forest statistics, 1996: Analysis by habitat type class. U.S. Department of Agriculture, Forest Service. North Central Research Station General Technical Report NC-207.

Kotar, John, Joseph A. Kovach, and Timothy L. Burger. 2002. Field guide to forest habitat types of northern Wisconsin, 2nd edition. Department of Forest Ecology and Management, University of Wisconsin-Madison.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [Online at http://soils.usda.gov/technical/]

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2003. Keys to soil taxonomy. 9th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

United States Department of Agriculture. 1961. Land capability classification. Soil Conservation Service. U.S. Department of Agriculture Handbook 210.

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430–VI. http://soils.usda.gov/technical/

United States Department of Agriculture, Soil Conservation Service. 1981. Land resource regions and major land resource areas of the United States. U.S. Department of Agriculture Handbook 296.

Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (available in local offices of the Natural Resources Conservation Service or on the Internet).

- **Ablation till.** Loose, relatively permeable earthy material deposited during the downwasting of nearly static glacial ice, either contained within or accumulated on the surface of the glacier.
- **Aeration, soil.** The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.
- **Aggregate, soil.** Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.
- **Alluvium.** Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.
- **Alpha,alpha-dipyridyl.** A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.
- **Aquic conditions.** Current soil wetness characterized by saturation, reduction, and redoximorphic features.
- **Argillic horizon.** A subsoil horizon characterized by an accumulation of illuvial clay. **Aspect.** The direction toward which a slope faces. Also called slope aspect.
- **Association, soil.** A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.
- Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backslope. The position that forms the steepest and generally linear, middle portion of a hillslope. In profile, backslopes are commonly bounded by a convex shoulder above and a concave footslope below.

Basal till. Compact till deposited beneath the glacial ice.

- **Base saturation.** The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, and K), expressed as a percentage of the total cation-exchange capacity.
- **Base slope** (geomorphology). A geomorphic component of hills consisting of the concave to linear (perpendicular to the contour) slope that, regardless of the

lateral shape, forms an apron or wedge at the bottom of a hillside dominated by colluvium and slope-wash sediments (for example, slope alluvium).

- **Beach deposits.** Material, such as sand and gravel, that is generally laid down parallel to an active or relict shoreline of a postglacial or glacial lake.
- **Beach ridge.** A low, essentially continuous mound of beach or beach-and-dune material accumulated by the action of waves and currents on the backshore of a beach, beyond the present limit of storm waves or the reach of ordinary tides, and occurring singly or as one of a series of approximately parallel deposits. The ridges are roughly parallel to the shoreline and represent successive positions of an advancing shoreline.
- **Bedding plane.** A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.
- **Bedrock.** The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.
- **Bedrock-controlled topography.** A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.
- **Bench terrace.** A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.
- **Bisequum.** Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.
- **Blowout.** A saucer-, cup-, or trough-shaped depression formed by wind erosion on a preexisting dune or other sand deposit, especially in an area of shifting sand or loose soil or where protective vegetation is disturbed or destroyed; the adjoining accumulation of sand derived from the depression, where recognizable, is commonly included. Blowouts are commonly small.
- **Board foot.** A unit of measurement represented by a board 1 foot wide, 1 foot long, and 1 inch thick.
- **Bog.** Waterlogged, spongy ground, consisting primarily of mosses, containing acidic, decaying vegetation (such as sphagnum, sedges, and heaths) that develops into peat.
- **Boulders.** Rock fragments larger than 2 feet (60 centimeters) in diameter.
- **Brush management.** Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.
- **Calcareous soil.** A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.
- **California bearing ratio** (CBR). The load-supporting capacity of a soil as compared to that of standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.
- **Canopy.** The leafy crown of trees or shrubs. (See Crown.)
- **Capillary water.** Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

- **Catena.** A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material and under similar climatic conditions but that have different characteristics as a result of differences in relief and drainage.
- **Cation.** An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.
- **Cation-exchange capacity.** The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Catsteps. See Terracettes.

Channery soil material. Soil material that has, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals. **Chiseling.** Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Closed depression (map symbol). A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and is without a natural outlet for surface drainage. Typically less than 4 acres.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that has 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material has 35 to 60 percent of these rock fragments, and extremely cobbly soil material has more than 60 percent.

COLE (coefficient of linear extensibility). See Linear extensibility.

Colluvium. Unconsolidated, unsorted earth material being transported or deposited on side slopes and/or at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Concretions. See Redoximorphic features.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the effects of the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

- Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."
- **Contour stripcropping.** Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.
- **Coprogenous earth (sedimentary peat).** A type of limnic layer composed predominantly of fecal material derived from aquatic animals.
- **Cord.** A unit of measurement of stacked wood. A standard cord occupies 128 cubic feet with dimensions of 4 feet by 4 feet by 8 feet.
- **Corrosion** (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.
- **Corrosion** (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.
- **Cover crop.** A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.
- **Crop residue management.** Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.
- **Cropping system.** Growing crops according to a planned system of rotation and management practices.
- **Cross-slope farming.** Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.
- **Crown.** The upper part of a tree or shrub, including the living branches and their foliage.
- Culmination of the mean annual increment (CMAI). The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.
- **Cut or fill area (map symbol).** A small area where the original soil profile has been altered by the addition or removal of more than about 1 foot of soil material. Includes former pits that have been reclaimed. Each symbol represents one area or several closely grouped areas totaling less than 4 acres.
- **Cutbanks cave** (in tables). The walls of excavations tend to cave in or slough.
- **Decreasers.** The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.
- **Deferred grazing.** Postponing grazing or resting grazing land for a prescribed period. **Delta.** A body of alluvium having a surface that is fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.
- **Dense layer** (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

- **Depression.** Any relatively sunken part of the earth's surface; especially a low-lying area surrounded by higher ground. A closed depression has no natural outlet for surface drainage. An open depression has a natural outlet for surface drainage.
- **Depth, soil.** Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.
- **Disintegration moraine.** A drift topography characterized by chaotic mounds and pits, generally randomly oriented, developed in supraglacial drift by collapse and flow as the underlying stagnant ice melted. Slopes may be steep and unstable. Abrupt changes between materials of differing lithology are common.
- **Diversion (or diversion terrace).** A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.
- Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."
- **Drainage, surface.** Runoff, or surface flow of water, from an area.
- **Drainageway.** A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.
- **Drift.** A general term applied to all mineral material (clay, silt, sand, gravel, and boulders) transported by a glacier and deposited directly by or from the ice or transported by running water emanating from a glacier. Drift includes unstratified material (till) that forms moraines and stratified deposits that form outwash plains, eskers, kames, varves, and glaciofluvial sediments. The term is generally applied to Pleistocene glacial deposits in areas that no longer contain glaciers.
- **Drumlin.** A low, smooth, elongated oval hill, mound, or ridge of compact till that has a core of bedrock or drift. It commonly has a blunt nose facing the direction from which the ice approached and a gentler slope tapering in the other direction. The longer axis is parallel to the general direction of glacier flow. Drumlins are products of streamline (laminar) flow of glaciers, which molded the subglacial floor through a combination of erosion and deposition.
- **Dry spot (map symbol).** A small area of moderately well drained to excessively drained soil within a poorly drained or very poorly drained area of mineral soil, or a somewhat poorly drained to excessively drained soil within a map unit consisting mainly of organic soil. Each symbol represents one area or several closely grouped areas totaling less than 4 acres.
- **Duff.** A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.
- **Eluviation.** The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.
- **End moraine.** A ridgelike accumulation produced at the outer margin of an actively flowing glacier at any given time.
- **Endosaturation.** A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.
- **Eolian deposit.** Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

- **Episaturation.** A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.
- **Erosion.** The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.
 - *Erosion* (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.
 - *Erosion* (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.
- **Erosion pavement.** A surficial lag concentration or layer of gravel and other rock fragments that remains on the soil surface after sheet or rill erosion or wind has removed the finer soil particles and that tends to protect the underlying soil from further erosion.
- **Erosion surface.** A land surface shaped by the action of erosion, especially by running water.
- **Escarpment.** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Most commonly applied to cliffs produced by differential erosion.
- **Escarpment, bedrock (map symbol).** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Exposed material is hard or soft bedrock.
- **Escarpment, nonbedrock (map symbol).** A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Exposed material is nonsoil or very shallow soil.
- **Esker.** A long, narrow, sinuous, steep-sided ridge of stratified sand and gravel deposited as the bed of a stream flowing in an ice tunnel within or below the ice (subglacial) or between ice walls on top of the ice of a wasting glacier and left behind as high ground when the ice melted. Eskers range in length from less than a kilometer to more than 160 kilometers and in height from 3 to 30 meters.
- **Fan remnant.** A general term for landforms that are the remaining parts of older fan landforms, such as alluvial fans, that have been either dissected or partially buried.
- **Fertility, soil.** The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.
- **Fibric soil material (peat).** The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.
- **Field moisture capacity.** The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity.*
- Fine textured soil. Sandy clay, silty clay, or clay.
- **Firebreak.** An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of firefighters and equipment. Designated roads also serve as firebreaks.

- **Flaggy soil material.** Material that has, by volume, 15 to 35 percent flagstones. Very flaggy soil material has 35 to 60 percent flagstones, and extremely flaggy soil material has more than 60 percent flagstones.
- **Flagstone.** A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.
- **Flood plain.** The nearly level plain that borders a stream and is subject to flooding unless protected artificially.
- **Flood-plain landforms.** A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, floodplain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.
- **Flood-plain splay.** A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.
- **Flood-plain step.** An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and/or deposition. May occur individually or as a series of steps.
- Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.
- **Footslope.** The concave surface at the base of a hillslope. A footslope is a transition zone between upslope sites of erosion and transport (shoulders and backslopes) and downslope sites of deposition (toeslopes).
- Forb. Any herbaceous plant not a grass or a sedge.
- **Forest cover.** All trees and other woody plants (underbrush) covering the ground in a forest.
- **Forest habitat type.** An association of dominant tree and ground flora species in a climax community.
- **Fragipan.** A loamy, brittle subsurface horizon low in porosity and content of organic matter and low or moderate in clay but high in silt or very fine sand. A fragipan appears cemented and restricts roots. When dry, it is hard or very hard and has a higher bulk density than the horizon or horizons above. When moist, it tends to rupture suddenly under pressure rather than to deform slowly.
- **Genesis, soil.** The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.
- **Glaciofluvial deposits.** Material moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and occur in the form of outwash plains, valley trains, deltas, kames, eskers, and kame terraces.
- **Glaciolacustrine deposits.** Material ranging from fine clay to sand derived from glaciers and deposited in glacial lakes mainly by glacial meltwater. Many deposits are bedded or laminated.
- **Gleyed soil.** Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.
- **Graded stripcropping.** Growing crops in strips that grade toward a protected waterway.
- **Grassed waterway.** A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.
- **Gravel.** Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.
- **Gravel pit (map symbol).** An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically less than 4 acres.

Gravelly soil material. Material that has 15 to 35 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

- **Gravelly spot (map symbol).** An area where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter within an area that has less than 15 percent rock fragments. Typically less than 4 acres
- **Green manure crop** (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.
- **Ground water.** Water filling all the unblocked pores of the material below the water table.
- **Gully.** A small channel with steep sides caused by erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.
- **Gully (map symbol).** A small channel with steep sides, cut by running water, through which water ordinarily runs only after a rain or after melting of snow or ice. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
- **Hard bedrock.** Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.
- **Hard to reclaim** (in tables). Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.
- **Head slope (geomorphology).** A geomorphic component of hills consisting of a laterally concave area of a hillside, especially at the head of a drainageway. The overland waterflow is converging.
- **Hemic soil material (mucky peat).** Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.
- **High-residue crops.** Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.
- **Hill.** A generic term for an elevated area of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline. Slopes are generally more than 15 percent. The distinction between a hill and a mountain is arbitrary and may depend on local usage.
- **Hillslope.** A generic term for the steeper part of a hill between its summit and the drainage line, valley flat, or depression floor at the base of a hill.
- Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:
 - O horizon.—An organic layer of fresh and decaying plant residue.
 - *L horizon.*—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.
 - A horizon.—The mineral horizon at or near the surface in which an accumulation

of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.—Soft, consolidated bedrock beneath the soil.

R layer.—Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

- **Humus.** The well decomposed, more or less stable part of the organic matter in mineral soils.
- **Hydrologic soil groups.** Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind of plant cover are not considered but are separate factors in predicting runoff.
- **Ice-walled lake plain.** A relict surface marking the floor of an extinct lake basin that was formed on solid ground and surrounded by stagnant ice in a stable or unstable superglacial environment on stagnation moraines. As the ice melted, the lake plain became perched above the adjacent landscape. The lake plain is well sorted, generally fine textured, stratified deposits.
- **Igneous rock.** Rock that was formed by cooling and solidification of magma and that has not been changed appreciably by weathering since its formation. Major varieties include plutonic and volcanic rock (e.g., andesite, basalt, and granite).
- **Illuviation.** The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.
- **Impervious soil.** A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.
- **Increasers.** Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasers commonly are the shorter plants and the less palatable to livestock.
- **Infiltration.** The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.
- **Infiltration capacity.** The maximum rate at which water can infiltrate into a soil under a given set of conditions.
- **Infiltration rate.** The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.
- **Intake rate.** The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake

rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

- **Interfluve.** A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.
- Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.
- Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.
- **Invaders.** On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. See Redoximorphic features.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.—Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes, or borders.

Controlled flooding.—Water is released at intervals from closely spaced field

ditches and distributed uniformly over the field.

Corrugation.—Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).—Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.—Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.—Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.—Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.—Water, released at high points, is allowed to flow onto an area without controlled distribution.

Island (map symbol). A small area of mineral soil within a body of water and above the normal water level. Each symbol represents one island or several closely grouped islands totaling less than 4 acres.

Kame. A low mound, knob, hummock, or short irregular ridge composed of stratified sand and gravel deposited by a subglacial stream as a fan or delta at the margin

of a melting glacier; by a supraglacial stream in a low place or hole on the surface of the glacier; or as a ponded deposit on the surface or at the margin of stagnant ice.

Karst (topography). A kind of topography that formed in limestone, gypsum, or other soluble rocks by dissolution and that is characterized by closed depressions, sinkholes, caves, and underground drainage.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K_{sat}. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Landslide. A general, encompassing term for most types of mass movement landforms and processes involving the downslope transport and outward deposition of soil and rock materials caused by gravitational forces; the movement may or may not involve saturated materials. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Linear extensibility. Refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. Linear extensibility is used to determine the shrink-swell potential of soils. It is an expression of the volume change between the water content of the clod at ½- or ½- bar tension (33kPa or 10kPa tension) and oven dryness. Volume change is influenced by the amount and type of clay minerals in the soil. The volume change is the percent change for the whole soil. If it is expressed as a fraction, the resulting value is COLE, coefficient of linear extensibility.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loess. Material transported and deposited by wind and consisting dominantly of silt-sized particles.

Low strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal proportions; formed primarily under freshwater lacustrine conditions but also formed in more saline environments.

Mass movement. A generic term for the dislodgment and downslope transport of soil and rock material as a unit under direct gravitational stress.

Masses. See Redoximorphic features.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement at depth in the earth's crust. Nearly all such rocks are crystalline.

Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

- **Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- **Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- **Miscellaneous area.** A kind of map unit that has little or no natural soil and supports little or no vegetation.
- **Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.
- **Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Moraine. In terms of glacial geology, a mound, ridge, or other topographically distinct accumulation of unsorted, unstratified drift, predominantly till, deposited primarily by the direct action of glacial ice in a variety of landforms. Also, a general term for a landform composed mainly of till (except for kame moraines, which are composed mainly of stratified outwash) that has been deposited by a glacier. Some types of moraines are disintegration, end, ground, kame, lateral, recessional, and terminal.
- **Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil. Irregular spots of different colors that vary in number and size.

 Descriptive terms are as follows: abundance—few, common, and many; size—fine, medium, and coarse; and contrast—faint, distinct, and prominent. The size measurements are of the diameter along the greatest dimension. Fine indicates less than 5 millimeters (about 0.2 inch); medium, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and coarse, more than 15 millimeters (about 0.6 inch).
- **Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- **Mudstone.** A blocky or massive, fine grained sedimentary rock in which the proportions of clay and silt are approximately equal. Also, a general term for such material as clay, silt, claystone, siltstone, shale, and argillite and that should be used only when the amounts of clay and silt are not known or cannot be precisely identified.
- **Munsell notation.** A designation of color by degrees of three simple variables—hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.
- **Neutral soil.** A soil having a pH value of 6.6 to 7.3. (See Reaction, soil.) **Nodules.** See Redoximorphic features.
- **Nose slope** (geomorphology). A geomorphic component of hills consisting of the projecting end (laterally convex area) of a hillside. The overland waterflow is predominantly divergent. Nose slopes consist dominantly of colluvium and slopewash sediments (for example, slope alluvium).
- **Nutrient, plant.** Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Organic matter. Plant and animal residue in the soil in various stages of decomposition. The content of organic matter in the surface layer is described as follows:

Very low	less than 0.5 percent
Low	0.5 to 1.0 percent
Moderately low	1.0 to 2.0 percent
Moderate	2.0 to 4.0 percent
High	4.0 to 8.0 percent
Very high	more than 8.0 percent

Outwash. Stratified and sorted sediments (chiefly sand and gravel) removed or "washed out" from a glacier by meltwater streams and deposited in front of or beyond the end moraine or the margin of a glacier. The coarser material is deposited nearer to the ice.

Outwash plain. An extensive lowland area of coarse textured glaciofluvial material. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block. **Pedisediment.** A layer of sediment, eroded from the shoulder and backslope of an erosional slope, that lies on and is being (or was) transported across a gently sloping erosional surface at the foot of a receding hill or mountain slope.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Perennial water (map symbol). A small, natural or constructed lake, pond, or pit that contains water most of the year. Each symbol represents one area of water or several closely grouped areas of water totaling less than 4 acres.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

- **Pitted outwash plain.** An outwash plain marked by many irregular depressions, such as kettles, shallow pits, and potholes, which formed by melting of incorporated ice masses; common in Wisconsin and Minnesota.
- **Pitting** (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.
- **Plastic limit.** The moisture content at which a soil changes from semisolid to plastic.
- **Plasticity index.** The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.
- Plateau (geomorphology). A comparatively flat area of great extent and elevation; specifically, an extensive land region that is considerably elevated (more than 100 meters) above the adjacent lower lying terrain, is commonly limited on at least one side by an abrupt descent, and has a flat or nearly level surface. A comparatively large part of a plateau surface is near summit level.
- **Plowpan.** A compacted layer formed in the soil directly below the plowed layer.
- **Poletimber.** Hardwood trees ranging from 5 to 11 inches in diameter and conifers ranging from 5 to 9 inches in diameter at breast height.
- **Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- **Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Pore linings. See Redoximorphic features.
- Potential native plant community. See Climax plant community.
- Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
- **Prescribed burning.** Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
- **Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- **Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- **Rangeland.** Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.
- **Reaction, soil.** A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0

Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Redoximorphic concentrations. See Redoximorphic features. **Redoximorphic depletions.** See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

- 1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron-manganese oxides, including:
 - A. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; and
 - B. Masses, which are noncemented concentrations of substances within the soil matrix; *and*
 - C. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.
- 2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron-manganese oxides alone or both iron-manganese oxides and clay have been stripped out, including:
 - A. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; and
 - B. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
- 3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Regolith. All unconsolidated earth materials above the solid bedrock. It includes material weathered in place from all kinds of bedrock and alluvial, glacial, eolian, lacustrine, and pyroclastic deposits.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill

generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

- **Riser.** The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.
- **Road cut.** A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.
- **Rock fragments.** Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.
- **Rock outcrop (map symbol).** An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock. Each symbol represents one exposure or several closely grouped exposures totaling less than 4 acres.
- Root zone. The part of the soil that can be penetrated by plant roots.
- **Runoff.** The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.
- **Saline soil.** A soil containing soluble salts in an amount that impairs growth of plants. A saline soil does not contain excess exchangeable sodium.
- **Sand.** As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.
- **Sandstone.** Sedimentary rock containing dominantly sand-sized particles.
- **Sandy spot (map symbol).** An area where the surface layer is loamy fine sand or coarser within an area where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer. Typically less than 4 acres.
- **Sapling.** A tree ranging from 1 to 5 inches in diameter at breast height.
- **Sapric soil material (muck).** The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.
- Saturated hydraulic conductivity (K_{sat}). See Permeability.
- **Saturation.** Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.
- **Sawtimber.** Hardwood trees more than 11 inches in diameter and conifers more than 9 inches in diameter at breast height.
- **Scarification.** The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.
- Sedimentary rock. A consolidated deposit of clastic particles, chemical precipitates, or organic remains accumulated at or near the surface of the earth under normal low temperature and pressure conditions. Sedimentary rocks include consolidated equivalents of alluvium, colluvium, drift, and eolian, lacustrine, and marine deposits. Examples are sandstone, siltstone, mudstone, claystone, shale, conglomerate, limestone, dolomite, and coal.
- Seedling. A tree less than 1 inch in diameter at breast height.
- **Sequum.** A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)
- **Series, soil.** A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

- **Shale.** Sedimentary rock that formed by the hardening of a deposit of clay, silty clay, or silty clay loam and that has a tendency to split into thin layers.
- **Sheet erosion.** The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.
- **Short**, **steep slope** (map symbol). A narrow area of soil that is at least two slope classes steeper than the surrounding map unit.
- **Shoulder.** The convex, erosional surface near the top of a hillslope. A shoulder is a transition from summit to backslope.
- **Shrink-swell** (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.
- **Side slope** (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.
- **Silica.** A combination of silicon and oxygen. The mineral form is called guartz.
- **Silt.** As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.
- **Siltstone.** An indurated silt having the texture and composition of shale but lacking its fine lamination or fissility; a massive mudstone in which silt predominates over clay.
- **Similar soils.** Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.
- Sinkhole. A closed, circular or elliptical depression, commonly funnel shaped, characterized by subsurface drainage and formed either by dissolution of the surface of underlying bedrock (e.g., limestone, gypsum, or salt) or by collapse of underlying caves within bedrock. Complexes of sinkholes in carbonate-rock terrain are the main components of karst topography.
- **Site index.** A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.
- **Slope.** The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance.
- Slope alluvium. Sediment gradually transported down the slopes of mountains or hills primarily by nonchannel alluvial processes (i.e., slope-wash processes) and characterized by particle sorting. Lateral particle sorting is evident on long slopes. In a profile sequence, sediments may be distinguished by differences in size and/ or specific gravity of rock fragments and may be separated by stone lines. Burnished peds and sorting of rounded or subrounded pebbles or cobbles distinguish these materials from unsorted colluvial deposits.
- **Slow refill** (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.
- **Soft bedrock.** Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.
- **Soil.** A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

- **Solum.** The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.
- Stone line. In a vertical cross section, a line formed by scattered fragments or a discrete layer of angular and subangular rock fragments (commonly a gravel- or cobble-sized lag concentration) that formerly was draped across a topographic surface and was later buried by additional sediments. A stone line generally caps material that was subject to weathering, soil formation, and erosion before burial. Many stone lines seem to be buried erosion pavements, originally formed by sheet and rill erosion across the land surface.
- **Stones.** Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.
- **Stony.** Refers to a soil containing stones in numbers that interfere with or prevent tillage.
- **Strath terrace.** A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).
- **Stream terrace.** One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream; represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.
- **Stripcropping.** Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.
- Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—platy (laminated), prismatic (vertical axis of aggregates longer than horizontal), columnar (prisms with rounded tops), blocky (angular or subangular), and granular. Structureless soils are either single grained (each grain by itself, as in dune sand) or massive (the particles adhering without any regular cleavage, as in many hardpans).
- **Stubble mulch.** Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind erosion and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.
- **Subsoil.** Technically, the B horizon; roughly, the part of the solum below plow depth. **Subsoiling.** Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer. **Summit.** The topographically highest position of a hillslope. It has a nearly level (planar or only slightly convex) surface.

- **Surface layer.** The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer," or the "Ap horizon."
- **Surface soil.** The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.
- **Swale.** A slight depression in the midst of generally level land. A shallow depression in an undulating ground moraine caused by uneven glacial deposition.
- **Terminal moraine.** An end moraine that marks the farthest advance of a glacier. It typically has the form of a massive arcuate or concentric ridge, or complex of ridges, and is underlain by till and other types of drift.
- **Terrace** (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.
- **Terrace** (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.
- **Terracettes.** Small, irregular steplike forms on steep hillslopes, especially in pasture, formed by creep or erosion of surficial materials that may be induced or enhanced by trampling of livestock, such as sheep or cattle.
- **Texture, soil.** The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay, and clay. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."
- **Thin layer** (in tables). Otherwise suitable soil material that is too thin for the specified use.
- **Till.** Dominantly unsorted and nonstratified drift, generally unconsolidated and deposited directly by a glacier without subsequent reworking by meltwater, and consisting of a heterogeneous mixture of clay, silt, sand, gravel, stones, and boulders; rock fragments of various lithologies are embedded within a finer matrix that can range from clay to sandy loam.
- **Till plain.** An extensive area of level to gently undulating soils underlain predominantly by till and bounded at the distal end by subordinate recessional or end moraines.
- **Tilth, soil.** The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.
- **Toeslope.** The gently inclined surface at the base of a hillslope. Toeslopes in profile are commonly gentle and linear and are constructional surfaces forming the lower part of a hillslope continuum that grades to valley or closed-depression floors.
- **Topsoil.** The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.
- **Trace elements.** Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.
- **Tread.** The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.
- **Upland.** An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation

- than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.
- **Valley fill.** The unconsolidated sediment deposited by any agent (water, wind, ice, or mass wasting) so as to fill or partly fill a valley.
- **Variegation.** Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.
- **Varve.** A sedimentary layer or a lamina or sequence of laminae deposited in a body of still water within a year. Specifically, a thin pair of graded glaciolacustrine layers seasonally deposited, usually by meltwater streams, in a glacial lake or other body of still water in front of a glacier.
- **Very stony spot (map symbol).** An area in which 0.1 to 3.0 percent of the surface is covered by rock fragments more than 10 inches in diameter within an area that does not have rock fragments on the surface. Typically less than 4 acres.
- **Water bars.** Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.
- **Weathering.** All physical disintegration, chemical decomposition, and biologically induced changes in rocks or other deposits at or near the earth's surface by atmospheric or biologic agents or by circulating surface waters but involving essentially no transport of the altered material.
- **Well graded.** Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.
- **Wet spot (map symbol).** An area of somewhat poorly drained to very poorly drained soil at least two drainage classes wetter than the named soils in the surrounding map unit. Each symbol represents one wet area or several grouped wet areas totaling less than 4 acres.
- **Wilting point (or permanent wilting point).** The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.
- **Windthrow.** The uprooting and tipping over of trees by the wind.

Where To Get Updated Information

The soil properties and interpretations included in this survey were current as of October 2004. More current information may be available from the Natural Resources Conservation Service (NRCS) Field Office Technical Guide at Spooner, Wisconsin, or online at www.nrcs.usda.gov/technical/efotg. The data in the Field Office Technical Guide are updated periodically.

More current information may also be available through the NRCS Soil Data Mart Website at http://soildatamart.nrcs.usda.gov.

Additional information about soils and about NRCS is available through the Wisconsin NRCS Web page at www.wi.nrcs.usda.gov.

For further information, please contact:

USDA, Natural Resources Conservation Service Spooner Service Center 800 North Front Street Spooner, WI 54801-1350

Phone: 715-635-8228